

Campaign

OSPREY
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Khe Sanh 1967–68

Marines battle for Vietnam's vital
hilltop base



Gordon L Rottman • Illustrated by H Gerrard & P Dennis



GORDON L. ROTTMAN entered the US Army in 1967, volunteered for Special Forces and completed training as a weapons specialist. He served in the 5th Special Forces Group in Vietnam in 1969-70 and subsequently in airborne infantry, long-range patrol and intelligence assignments until retiring after 26 years. He was a special operations forces scenario writer at the Joint Readiness Training Center for 12 years and is now a freelance writer.

HOWARD GERRARD studied at the Wallasey School of Art and has been a freelance designer and illustrator for over 20 years. He has worked for a number of publishers and has illustrated a number of books for Osprey including Campaign 69: *Nagashino 1575* and Campaign 72: *Jutland 1916*. Howard lives and works in Kent.

PETER DENNIS was born in 1950. Inspired by contemporary magazines such as *Look and Learn* he studied illustration at Liverpool Art College. Peter has since contributed to hundreds of books, predominantly on historical subjects. He is a keen wargamer and modelmaker.

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Series editor Lee Johnson

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NORTH AMERICA
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Abbreviations

AbnDiv	Airborne Division
ARVN	Army of the Republic of Vietnam (pronounced "Ara-vin")
ASP	Ammunition Supply Point ("ammunition dump")
BVSS	33d Royal Lao Lian Battalion
C4	plastic explosive
CAP	Combined Action Program
CavDiv (AM)	Cavalry Division (Airmobile)
CCN	Command and Control North (MACV-CCG)
CIDG	Civilian Irregular Defense Group
CO	Commanding Officer
COC	Combat Operations Center
CTZ	Corps Tactical Zone
DZ	drop zone (parachute)
FOB	Forward Operations Base
HQ	Headquarters
III MAF	III Marine Amphibious Force
KIA	killed in action
KSCB	Khe Sanh Combat Base
LZ	landing zone (helicopter)
MACV	Military Assistance Command, Vietnam
MarDiv	Marine Division
MAW	Marine Aircraft Wing
NVA	North Vietnamese Army
PAVN	People's Army of Vietnam (NVA)
QL 9	National Route 9 (Quoc Lo 9)
RLT	Regimental Landing Team
SOG	Studies and Observation Group (MACV-SOG)
US	United States
USSF	United States Special Forces
VC	Viet Cong
WIA	wounded in action
(-)	reduced (elements detached from parent unit)
(+)	reinforced (additional elements attached)

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Artists' note

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Peter Dennis
Fieldhead
The Park
Mansfield
Notts
NG18 2AT
UK

Howard Gerrard
11 Oaks Road
Tenterden
Kent
TN30 6RD
UK

The Publishers regret that they can enter into no correspondence upon this matter.

Metric measurements are primarily used in this book, following US Army practice since the early 1960s.

US Marine and US Army Officer Ranks

2dLt	2nd Lieutenant
1stLt	1st Lieutenant
Capt	Captain
Maj	Major
LtCol	Lieutenant Colonel
Col	Colonel
BGen	Brigadier General ("one-star")
MajGen	Major General ("two-star")
LtGen	Lieutenant General ("three-star")
Gen	General ("four-star")

Battalions organic to US Marine and US Army regiments are designated with the battalion and regimental number, for example, 1/26 Marines or 1/7 Cavalry (if assigned to 1st Cavalry Division). Companies and batteries are designated, for example, B/1/13 - Battery B, 1st Battalion, 13th Marines.

KEY TO MILITARY SYMBOLS

ARMY GROUP	ARMY	CORPS	DIVISION	BRIGADE
REGIMENT	BATTALION	COMPANY	INFANTRY	CAVALRY
ARTILLERY	ARMOR	MOTORIZED	AIRBORNE	SPECIAL FORCES

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VIETNAM STRATEGIC SITUATION, 1968



ORIGINS OF THE CAMPAIGN

The campaign on the Khe Sanh plateau spanned a period of over a year and was essentially a series of interconnected battles. None of the battles was strategically decisive, but they attracted a great deal of attention as the media focused on this small, remote plateau and drew endless comparisons with the French defeat at Dien Bien Phu 12 years earlier. The press repeatedly predicted the defeat of the Marines throughout the 77-day siege of Khe Sanh Combat Base (KSCB), but the Marines took a somewhat different view – to them it was “the so-called siege.”

Khe Sanh was a small village in the extreme northwest of the Republic of Vietnam (South Vietnam). It was located in Quang Tri, the northernmost province of South Vietnam whose northern border ran along the Demilitarized Zone (DMZ) separating South Vietnam from the Democratic Republic of Vietnam (North Vietnam). This area was remote, sparsely populated, and a focal point of the war effort in 1968. North Vietnamese Army (NVA) forces were infiltrating the south in ever greater numbers, escalating the war and raising the stakes.

A string of US Marine Corps and Vietnamese combat bases had been established south of the DMZ to protect the population centers and the lines of communication along the coast. The Marine forces were part of III Marine Amphibious Force (III MAF), which was responsible for over 81,000 troops in January 1968. Also in the northern portion of South Vietnam was the Army of the Republic of Vietnam's (ARVN) I Corps Tactical Zone (I CTZ). Most of the ARVN forces were concentrated on the populous coastal plain, with some deployed in the hills that stretched inland. Only a small base at Khe Sanh secured the westernmost sector, some 30 kilometers (19 miles) of rugged country stretching from the Marine combat bases at the “Rockpile” and Ca Lu to the Laotian border. Khe Sanh had only one line of communication, National Route 9 (QL9 – *Quoc Lo 9*) running east–west between Quang Tri Province and Laos. This “National Route” consisted in reality of a one-lane dirt road that crossed scores of streams along its route and as a result was all too easily cut by the enemy. The hills and forests that characterized northwest Quang Tri Province concealed enemy movements and the many bridges were vulnerable in the extreme and easy to destroy, with few alternative routes available through the deep gorges. To exacerbate the situation, the weather conditions predominantly favored the enemy.

The North Vietnamese were taking advantage of the porous nature of the US/ARVN defenses in this remote area to infiltrate large numbers of troops and supplies into South Vietnam through Laos via the Ho Chi Minh Trail. The “Trail” was actually a network of roads and pathways running from North Vietnam south through Laos and Cambodia into the Republic of Vietnam. The heavily wooded and hilly terrain, sparse

population, weak Free World forces, and natural infiltration routes put the NVA in a very strong position in this region.

The battle for Khe Sanh is often depicted as purely a Marine Corps operation, but the reality was very different. US Army forces, including the 1st Cavalry Division (Airmobile), were assigned to the defense of the KSCB alongside Marine units and were also heavily committed to relief and support operations in the area. US Army Special Forces and ARVN units were also involved and US Air Force, Marine Corps, US Navy and Vietnamese Air Force aircraft were heavily committed in the close air support, bombing, reconnaissance, resupply, and medical evacuation (medevac) roles.

What about Dien Bien Phu?

Throughout the Khe Sanh campaign the media maintained insistent and dogmatic comparisons of Khe Sanh with the disastrous French defeat at Dien Bien Phu in 1954, with almost constant predictions that the Marine base would fall at any moment. Almost 40 percent of the stories filed in February and March 1968 dealt with Khe Sanh. While there are undoubted similarities between the two battles, a rational assessment, even without the advantages of hindsight, should have demonstrated that both tactically and strategically the two situations bore little comparison. It is clear that, as with the French at Dien Bien Phu, the US held a fortified position centered on an airfield in a remote valley, surrounded by mountainous terrain deep inside hostile territory. The Free World troops, like the French, were cut off from overland communications and relied solely on aerial resupply, making heavy demands of available air assets. Effective close air support was critical in both instances, with the enemy deployed on hills overlooking the strongholds and freely able to fire artillery into them – artillery duels were almost constant in both cases. On both occasions the defending forces lost exposed outlying positions: Strongpoint “Gabrielle” in the case of Dien Bien Phu, and Khe Sanh village and Lang Vei Special Forces Camp outside Khe Sanh Combat Base. The weather also played a major part in both operations. While the similarities were real and too obvious for the media to resist drawing comparisons, at the level of military operations, they were largely superficial.

The French base at Dien Bien Phu had been much more remote from its supporting base, some 200 kilometers distant. Khe Sanh was only 45km from its support base, barely a 20-minute helicopter flight. At Dien Bien Phu the French position had been dominated by enemy-controlled hills completely surrounding the base, with much of the Viet Minh artillery within 3–5km. At Khe Sanh the Marines occupied the key hills dominating the base to a distance of as much as 7km, forcing the NVA to deploy their artillery between 9 and 13km away, although mortars were able to move in



Khe Sanh Combat Base viewed from the east looking the length of the runway. The outer perimeter at the photograph's bottom is the 37th ARVN Ranger Battalion's line. Behind it and curving back to the left is the Marines' Gray Sector. The Blue Sector parallels the right edge. The dark area off the right end of the road running toward the bottom of the photograph from the parking area and adjacent to the runway is ASP No. 1 (ammo dump). The FOB-3 compound is in the upper left.

Many feared that Khe Sanh would be a repeat of Dien Bien Phu. Here victorious Viet Minh raise their flag over the French former command post in Strongpoint Claudine, May 8, 1954.



closer. Despite possessing artillery that was lighter and of shorter range than that at Khe Sanh, the Viet Minh had more than 200 pieces of artillery, including mortars, at Dien Bien Phu; this was many more than the NVA had at its disposal around Khe Sanh. The Marines at the Combat Base had some 30 tubes at their disposal and were additionally supported by four batteries of 175mm guns further east. The French at Dien Bien Phu had no external artillery support, and of their 48 artillery pieces half were short-ranged heavy mortars, and some were lost in the first days. With the exception of the four hill positions to the north, Khe Sanh was concentrated in a 400–600 by 2,300 meter area, while the French positions at Dien Bien Phu sprawled across a 2,600 by 3,000 meter area with three large outlying strongpoints. Khe Sanh's smaller size allowed it to be defended by a much smaller force. Dien Bien Phu was densely packed with troops and proved difficult to defend. Just 6,680 troops defended Khe Sanh, six battalions counting Forward Operations Base 3 (FOB-3) and the tiny Ranger battalion, of which three were defending the hill outposts. Dien Bien Phu held 16,500 troops, 19 infantry battalions (including later parachute-delivered reinforcements), making supply extremely difficult.

The French needed 150 tons of aerial resupply per day requiring 80 transport aircraft sorties. On average they delivered 117–123 tons, of which 100 were usable. They had only 75 combat aircraft and 100 transports and reconnaissance aircraft available, and the French C-47s had a payload of only 4 tons, while US C-130Es and C-123Ks carried 13 and 5 tons respectively. When the French fought at Dien Bien Phu there were 54 helicopters in all of French Indochina; the US had over 3,300 in 1967–68. A total of 9,109 Marine helicopter sorties transported 14,562 passengers and 4,661 tons of cargo to Khe Sanh, while Air Force transports delivered over 14,000 tons of cargo. The French conducted around 10,400 aircraft sorties of all types to support the 167-day siege; the US sometimes exceeded 2,500 sorties a day across South Vietnam. The French required 34,000 tons of engineering materials to completely fortify Dien Bien Phu, but the garrison received only 4,000 tons. The French were hard-pressed to maintain three days' ammunition and

rations, but while there were occasional shortages at Khe Sanh, a 30-day supply was maintained. The US dropped almost as much tonnage of bombs (114,810 tons) at Khe Sanh in three months as B-29s rained on Japan during 1945. Helicopter support was essential as this was the only way the hill outposts could be supplied, replacements delivered, and casualties evacuated. French aircraft losses included 48 shot down, 14 destroyed on the ground, and 167 damaged. The US losses amounted to four transports shot down and 23 Marine fixed-wing aircraft and 123 helicopters damaged, mostly superficially. Fewer than three dozen helicopters were lost and very few attack aircraft were damaged. It proved impossible to evacuate most of the wounded from Dien Bien Phu. The US evacuated 2,000 seriously wounded from Khe Sanh and fewer than 300 lightly wounded were returned to duty.

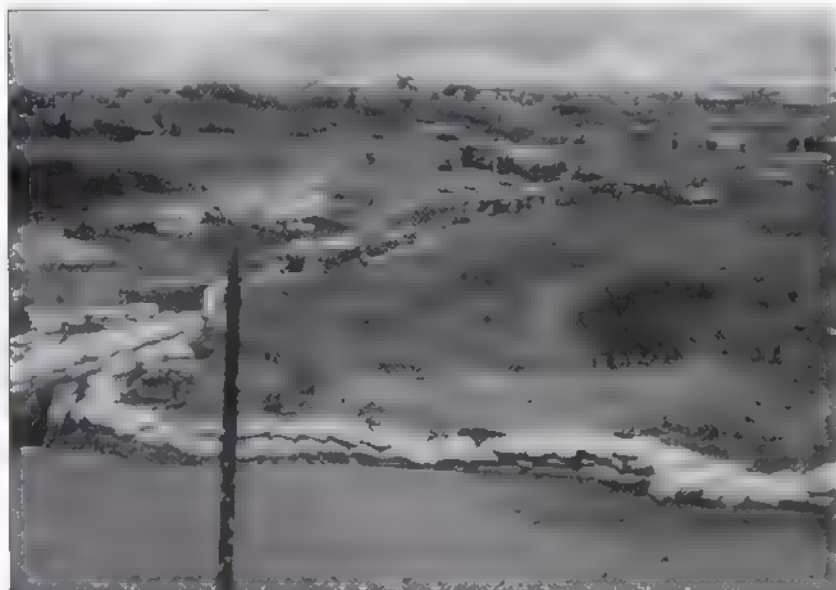
The media's "Dien Bien Phu Syndrome" regarding Khe Sanh often dwelled on the NVA tying down 6,680 Marines. Granted, Khe Sanh required extensive air support, but this did not markedly degrade the air support necessary to defeat the Tet Offensive occurring at the same time. The media's standpoint also failed to acknowledge that four, and later five, NVA divisions were being tied down by 6,680 Marines, troops that could have been used elsewhere to support the Tet Offensive. The NVA siege required massive logistical resources and sucked in a great deal of manpower, including transport and rear-area service troops. The amount of ammunition they expended on Khe Sanh could have been used against the many Free World combat bases along the DMZ and against populated areas.

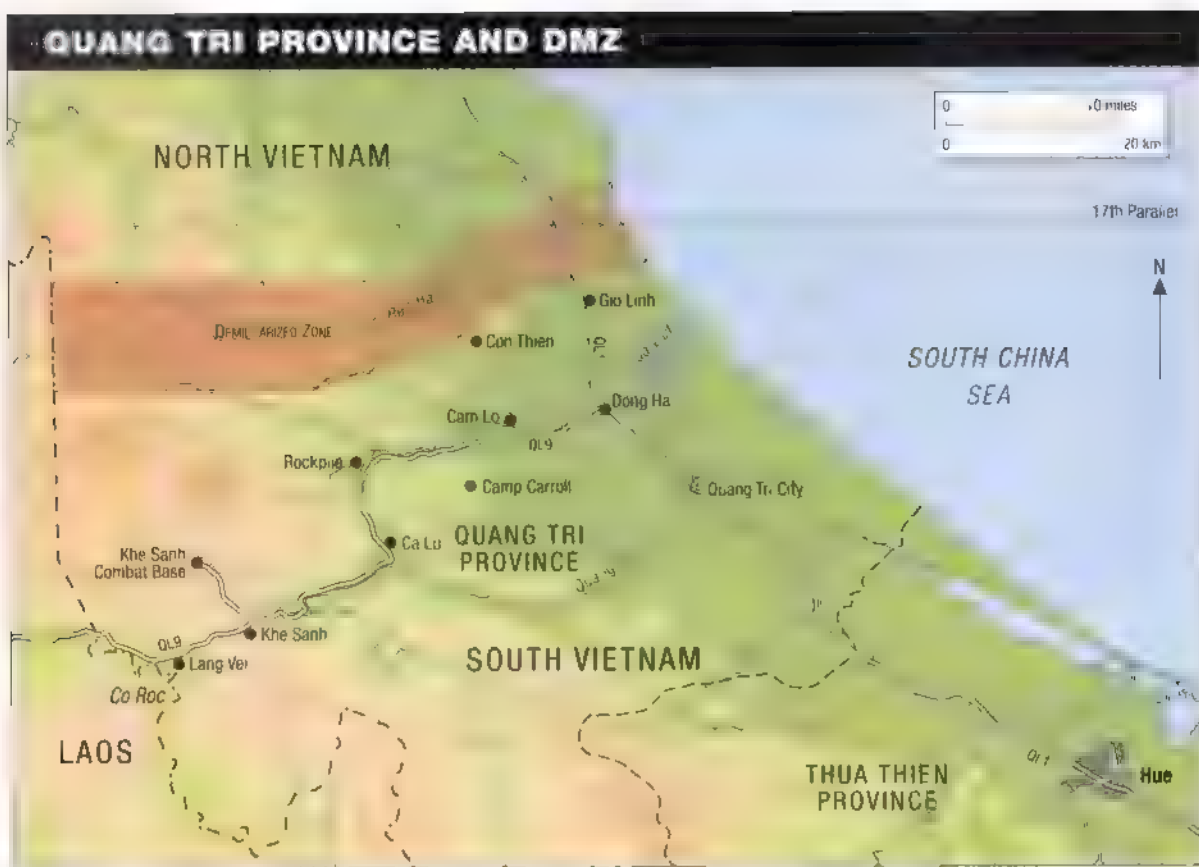
Another factor that must be considered is that the defenders of Dien Bien Phu knew within three weeks of the beginning of the siege that they were in dire straits. The defenders of Khe Sanh, the grunt Marines,

Major Weapons: Khe Sanh and Dien Bien Phu

US/French	Khe Sanh	Dien Bien Phu
heavy mortars	7 x 4.2in	28 x 120mm
155mm howitzers	14	24
155mm howitzers	6	4
rockets	96 x 120mm	8-12 x 160mm
tanks	6 x 90mm	10 x 100mm
quad .50 cal MGs	4	4
weapons	2	
Artillery expenditure (rounds)		
US/French	158,900	93,000
NVA/Viet Minh	11-14k	1,000,000

Cloud-shrouded hills provide the backdrop to KSCB. This is the north perimeter trench showing fighting bunkers along the trench line. The gray-green woven plastic and tan burlap sandbag parapets against the dark red soil highlight the trench outlines. The airfield is beyond the buildings and tents in the background.



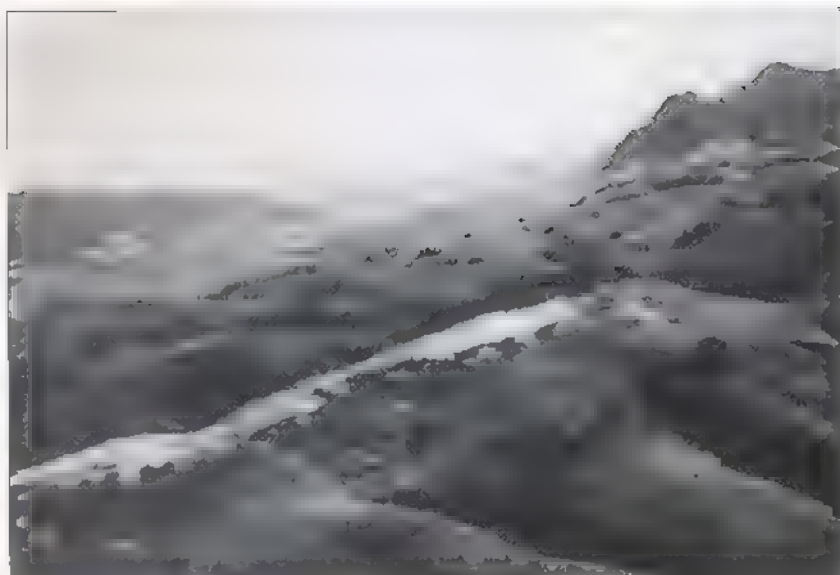


never had a doubt they would hold and were chomping at the bit to get at the enemy with offensive operations.

The French lost at least 4,000 dead or missing with over 10,000 surrendering, many of whom were wounded (figures are not always consistent or reliable because losses in the final days were not recorded). US losses at Khe Sanh were a fraction of this and are discussed in the *Aftermath* chapter of this book. Of the 49,500 Viet Minh troops at Dien Bien Phu, an estimated 7,900 were killed and 15,000 wounded.

Terrain and weather

Quang Tri ("Great Administration") was South Vietnam's most northerly province and bordered North Vietnam, its border defined by the Song (river) Ben Hai – ostensibly a demilitarized zone. With Laos lying just to the west, the area was known as the tri-border region. Stretching inland from the South China Sea coast is an approximately 30km-wide coastal plain where most of the province's population resided and where most US and ARVN forces were deployed. Running south out of Laos is the rugged Annamite Cordillera (mountain range) which cuts through the western portion of the province, stretching some 40–50km from the Laotian border. Two narrow rivers flow east out of the Annamites, the Song Cam Lo in the north running roughly parallel with and south of the DMZ, and the Song Quang Tri further south, a tributary of which, Song Rao Quan, flows past Khe Sanh. They meet on the coastal plain just east of Dong Ha, merging into the Song Cua Viet.



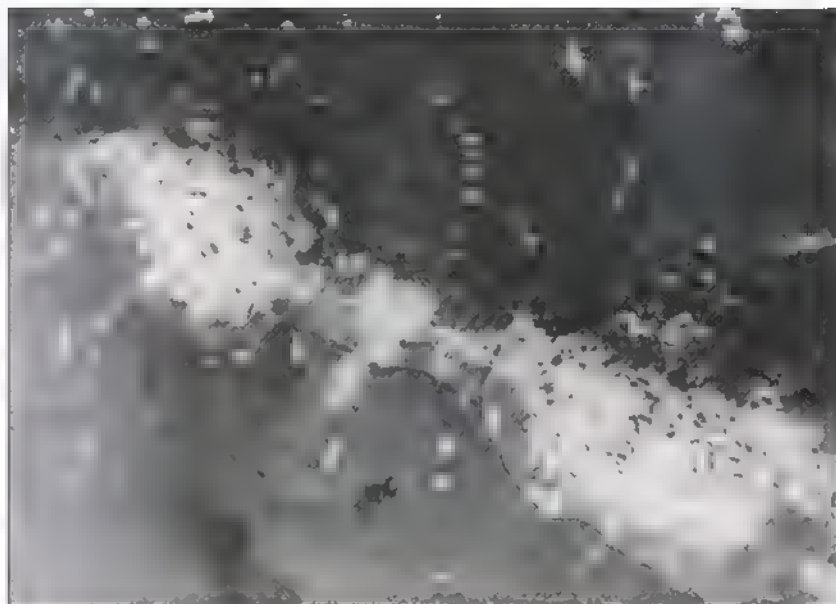
Hill 881S from the southwest. M/3/26 Marines (-) defended the west (left) hilltop and I/3/26 the east. 881S took the worst pounding of any of the hill outposts, but never a direct infantry assault. The two predominant peaks in the background are 950, with the radio relay site, and 1015. 861 and 861A is the faint light spot below the saddle separating the two peaks.

The Annamites rise over 5,000ft north of Khe Sanh and 2,200ft to the west. Nestled in the mountains some 60km inland is the Khe Sanh plateau, a small triangular plateau measuring around 5–6km each side. The Laotian border is some 18km to the west and the DMZ around 30km to the north. While the distances are not great, the plateau lies in an extremely remote position, accessed along a single neglected road, National Route 9 (QL9), winding through the hills and crossing dozens of streams and rivers. The road distance between Khe Sanh and Dong Ha was 63km and was dotted with 36 bridges, many bypassed because of their dilapidated condition. From Ca Lu, 18km east-northeast of Khe Sanh, QL9 was a dirt road all the way to Laos and easily cut by enemy forces concealed in the dense terrain. At a point 2km southwest of Khe Sanh, QL9 turned into a single-lane track running southwest into Laos through Khe Sanh village. A dirt road branched off at this point to run northwest to KSCB.

The major Marine base in Quang Tri was at Dong Ha, 45km to the east-northeast where QL9 connected to the north–south QL1 running south to Quang Tri City. The Marine combat bases closest to KSCB were the “Rockpile” 20km northeast and Camp “J.J. Carroll” 25km east-northeast. Over a dozen other Marine and ARVN combat bases were scattered between Carroll and the coast, protecting the coastal plain from NVA thrusts across the DMZ. QL9, running east from Laos, and the valley of the Khe Ta Hong stream, running from the northwest from the junction of the DMZ/Laotian border, both converged on the Khe Sanh plateau and were accessible from the Ho Chi Minh Trail network in Laos. Just inside Laos and parallel with Khe Sanh along QL9 was Co Roc Mountain 13km to the southwest. This large 850m ridge served as an NVA artillery position.

The Khe Sanh plateau is about 1,500ft above sea level and is generally flat, though there are low, gently rolling hills on the southern and western sides. Its northeast side is defined by the approximately 300m-deep Rao Quang gorge a few hundred meters north and east of the Khe Sanh airfield, with the narrow river itself flowing northwest to southeast. The

A vertical view of 881S. North is to the upper right corner. Much of the barrier wire pattern can be discerned as well as the helicopter LZ between the two peaks. Bomb craters from earlier fighting are apparent.



plateau is covered by scattered trees, brush, bamboo, 3–10ft-high elephant grass, and cultivated plots of coffee plants. On the plateau's higher elevations double-canopy rainforest dominates, with trees up to 90ft high and the second-canopy trees growing up to 60ft. Thin underbrush makes movement easy while providing cover from aerial observation. In some lower areas the ground had once been cleared, but the jungle reclaimed it; 20–40ft trees, bamboo, and underbrush cover this area, restricting movement. The hills are moderately sloped and dome-shaped, their sides cut by finger-like ridges and gorges making cross-country movement difficult. Local tracks wind throughout the area, but the dense vegetation and broken ground provide cover and concealment from air and ground observation and fire.

A ragged line of hills stretching west to east north of Khe Sanh was critical to both sides. Hill 881⁴ South (881S) was 7km west-northwest of KSCB. Hill 881 North (881N), a key NVA position, lay 2km north of 881S. Hills 861 and 861A were 4km to the northwest, with the two peaks separated by a 400m saddle. Hill 558 lay 4km north-northwest of KSCB, and about 1.5km east-northeast of 861A, while Hill 950 was 4.5km due north of KSCB. Just over a kilometer to the east is Hill 1015 (Dong Tri, "Tiger Tooth Mountain"), the highest peak in the immediate area. Caves pockmarked some of the limestone hills while the soil was a rich deep volcanic red.

Some 3.5km south of KSCB was Khe Sanh village, which was the location of the Huong Hoa District (equivalent to a US county) Headquarters prior to the siege. Lang Vei Special Forces Camp was 9km southwest of KSCB, in an exposed position astride QL9. In September 1967 the camp was re-opened 1km further west, just over 2km from the Laotian border. Over 10,000 Vietnamese lived in the district in four villages with 12,000 Montagnards⁵ in a half-dozen villages.

It is often argued that in warfare the weather is neutral, but it can, nevertheless, severely hamper operations dependent on good weather. Equally, poor weather conditions can be a powerful ally to a force

operating with limited resources and relying on undetected movement. At Khe Sanh the Marines depended heavily on favorable weather to enable them to observe and detect enemy troops and artillery, which in turn allowed these to be targeted by US ground attack missions. The availability of air support was essential to allow air strikes, aerial surveillance, and the delivery of supplies on which the base was totally dependent.

The siege of Khe Sanh took place between mid January and the beginning of April 1968, within the period of the northeast monsoon. For most of Southeast Asia, November to March brought dry winds from China, a period of little rain and clear skies. The northern area of South Vietnam was an exception to this general rule, as the dry winds from China collected moisture as they passed over the South China Sea. This in turn resulted in rain as the winds crossed the highlands of South Vietnam. Rather than the dry season experienced in the rest of the region, this part of Vietnam essentially had a year-round wet season. The weather on the Khe Sanh plateau and surrounding area was characterized by low clouds, fog, overcast skies, and sporadic light rains. Annual rainfall was 80in, most of it falling during the northeast monsoon.

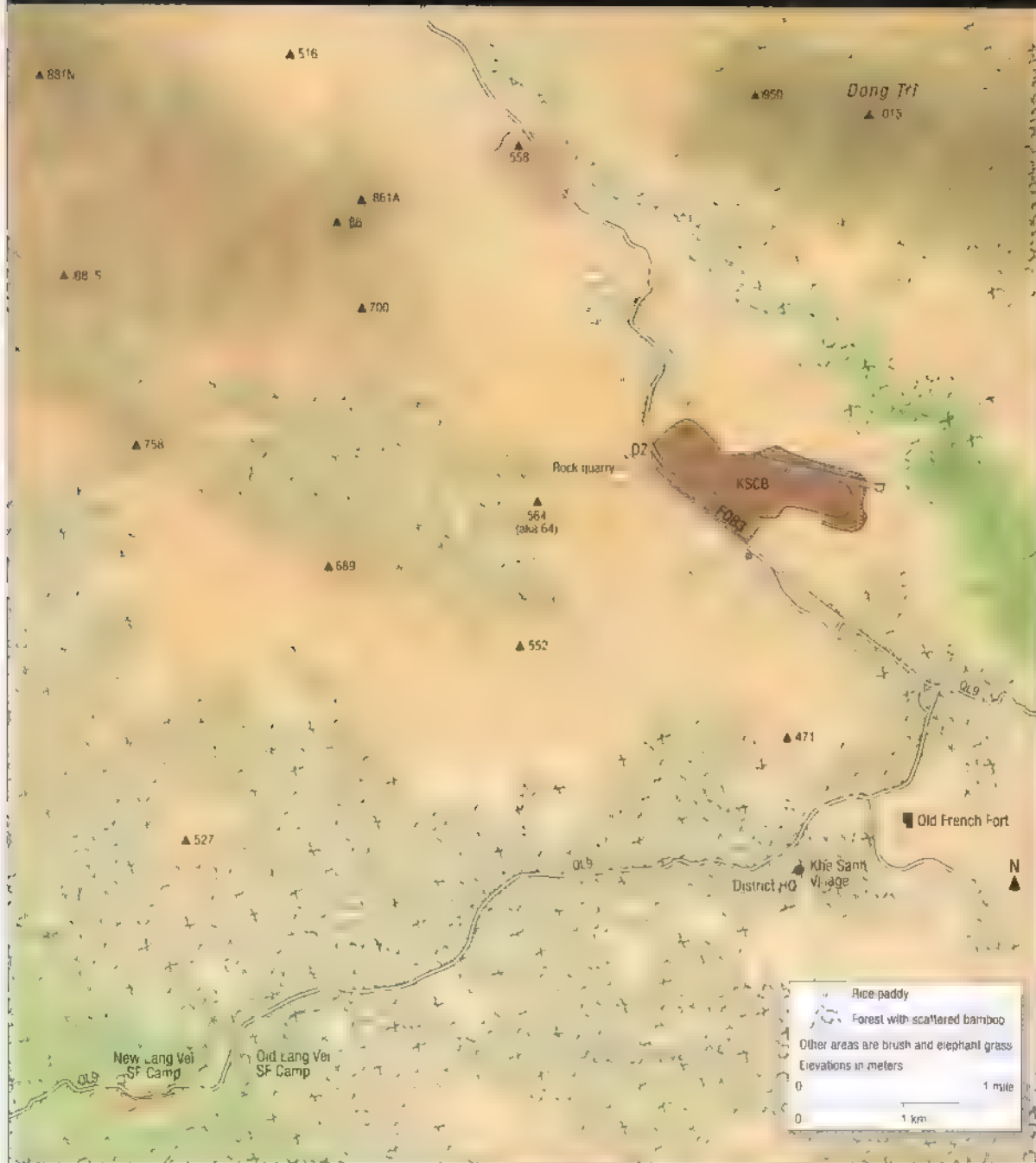
The heavy rain was accompanied by a weather phenomenon known as the *crachin*, in which dense 3,000–5,000ft-thick cloud formations reach as low as 500ft, reducing visibility to less than half a mile. Lasting from three to five days with light rain, these periods all but precluded close air support and aerial resupply. The cloud and fog at Khe Sanh was heavier than usual during the siege. Cloud cover extended to below 2,000ft on more than half the mornings, with visibility less than 2 miles. By early afternoon the cloud would normally lift to around 3,000ft.

What the US had not appreciated was that the base itself affected the weather. Fog formed at night as the ground cooled, with the high-humidity air condensing and clouds settling on the hills and plateau. Warmer air in the Rao Qung gorge rose as the higher ground cooled and added to the fog as it condensed. At sunrise, rather than the fog burning off as was typical, the airfield's aluminum matting and surrounding bare ground warmed rapidly, drawing the now night-cooled air up from lower ground to condense and create dense morning fog over the base. The fog sometimes lifted or burned off in the late morning or early afternoon, but by late afternoon or early evening would begin forming once more as the runway cooled, again leading the moist monsoon air to condense. KSCB was itself a "fog factory." Seldom was there any more than six hours of clear sky, and even then visibility was less than 5 miles. Although not actually cold, the base could be damp and chilly, with drizzle sometimes lasting for days. Afternoons were, by contrast, often hot and humid.

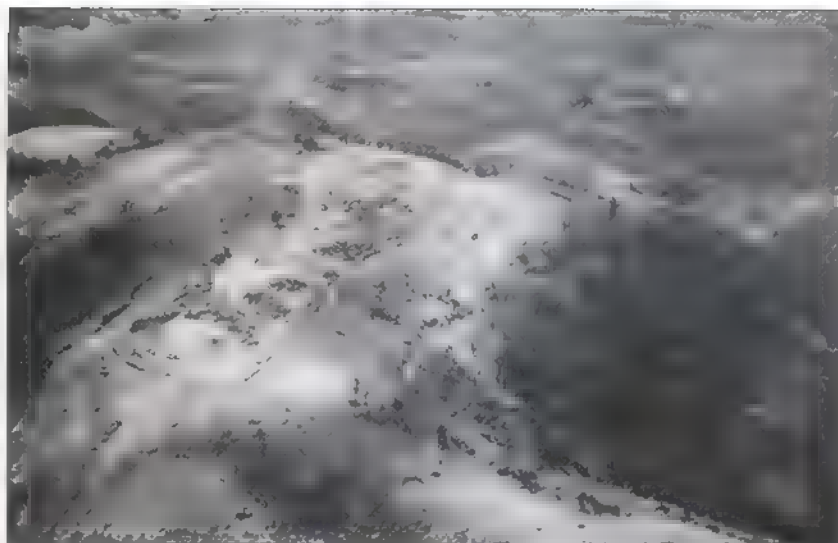
Khe Sanh Combat Base

ARVN engineers had built a dirt airstrip north of Khe Sanh village in September 1962, making it the most northwestern airfield in South Vietnam (designated VA1-44). A radio relay site (Lemon Tree) had been established on Hill 950 in late 1964, protected by a rifle platoon – the first Marine combat unit deployed to Vietnam. In September 1966, Navy Mobile Construction Battalion 10 Seabees improved the 1,500ft runway, extending it to 3,300ft and adding steel planking to allow cargo aircraft

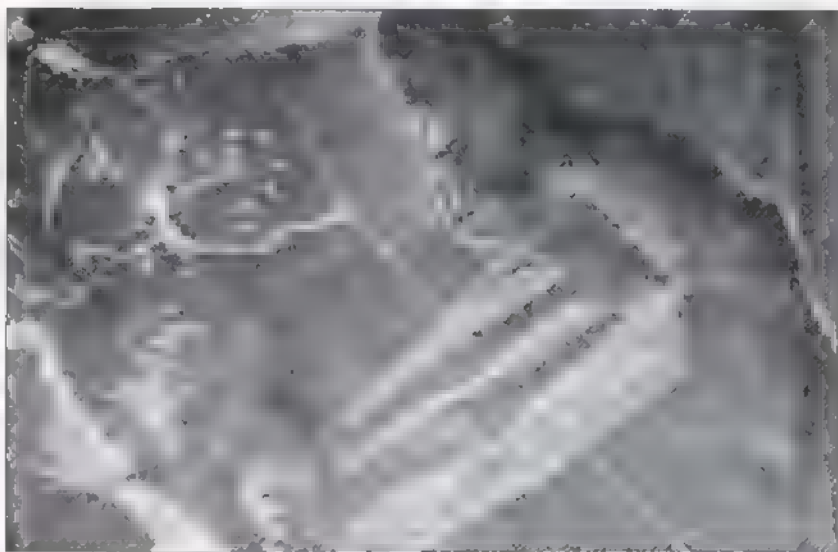
KHE SANH COMBAT BASE



to use it. A Marine battalion occupied the airfield in October 1966, and in December 1966 the Special Forces camp (established there in July 1962 on the south central part of the strip) was relocated to Lang Vei, 9km to the southwest. Six different A-teams⁸ occupied the camp on six-month rotating tours until A-101 became the permanent resident team in December 1966. From February 1967, only a single Marine company (E/2/9) garrisoned the Khe Sanh airfield until the April-May



Hill 861A, the lower near portion, and 861 were defended by E/2/26 and K/3/26 with two platoons A/1/26, respectively. The clear light spot between the two main positions is a helicopter LZ. The NVA attacks of January 21 and February 6 came up the wooded slope to the right.



A thousand troops of 2/26 Marines (-) were dug-in around Hill 558 blocking the Rao Qung gorge (upper right) and a dirt road (cutting diagonally through the perimeter) approaching KSCB from the northwest. The actual Hill 558 is in the upper left. The irregular light areas are cleared swatches around the perimeter.

1967 Hill Battles. At that time KSCB bore only a passing resemblance to the fortified complex it became during the siege.

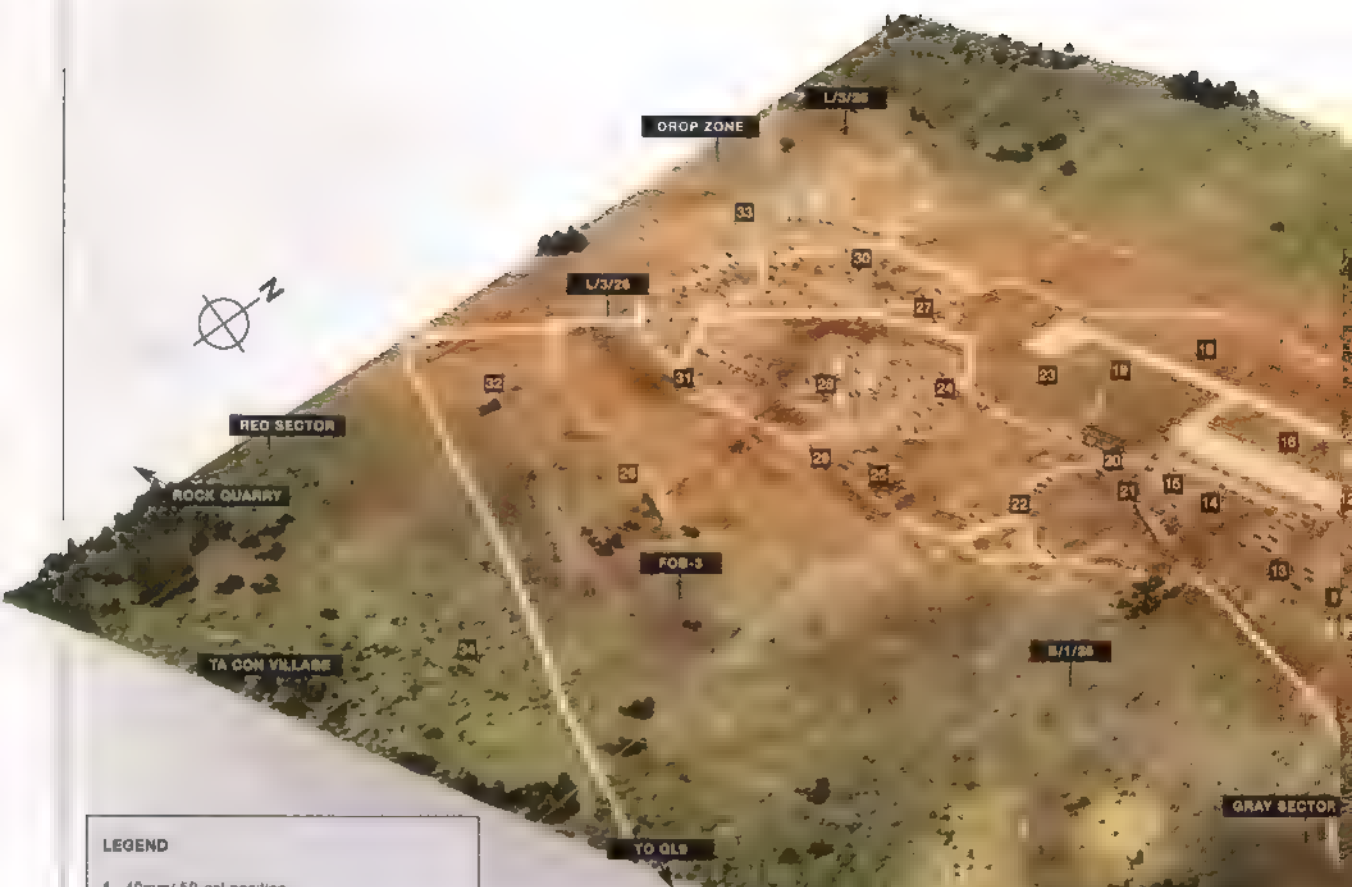
As action increased in the area, the Seabees of Naval Mobile Construction Battalion Unit 301 improved the airfield, on which the matting had buckled during the monsoon rains. They established a rock quarry one mile to the southwest, and closed the airfield on August 17, 1967. They pulled up the pierced steel planking, extended the runway to 3,895ft, laid an asphalt-bonded, crushed-rock foundation, installed 3,000 new panels of AM2 matting, and re-opened the airfield on October 27. Resupply during this period was carried out by airdrop, helicopter, and C-7A Caribous landing on short runway sections.

KSCB presented a worn, battered, cluttered appearance. Constant shelling, ongoing construction projects and repairs, haphazardly stacked materials and supplies, damaged vehicles, aircraft wreckage, piles of expended artillery cartridges, ammunition boxes, and tubes and packaging littered the base. Anything that could be used for construction

materials – wooden ammunition boxes, pallets, fuel drums – were quickly put to use. Hundreds of radio antennae were scattered across the base, many of them dummies even erected over latrines in an attempt to provide a multitude of potential targets to frustrate the enemy. Miles of field telephone wire snaked through the trenches of the base.

When the base was first established a single coil of concertina wire protected the perimeter, and brush and elephant grass left poor fields of observation and fire. The barrier was upgraded and by the time of the siege it presented a formidable obstacle. Beyond hand-grenade range of the trench line was a double row of concertina razor wire⁷ with a third stacked on top making the barrier 6ft high. Beyond this *jougusse* flame weapons⁸ were buried at intervals, along with command-detonated M18A1 Claymore antipersonnel mines. Next was a double-apron barrier, a multi-strand barbed-wire fence with anchor wires in a “V” pattern on both sides. Across the anchor wires were placed horizontal strands creating sloping barriers – the aprons. In some sectors another double- or single-apron fence might be erected even further out. Between the barriers was strung “tanglefoot” – barbed wire set horizontally in crisscross patterns 1ft above the ground, designed to slow attackers. There were wide, clear strips between the barriers and tanglefoot. These areas were often planted with M16A1 (“bouncing betty”) and M14 (“toe-popper” or “shoe polish can”) antipersonnel mines as well as some M15 and M19 antitank mines. Apparently abandoned, partly used barbed-wire spools and barbed-wire pickets were left among the barriers for NVA sappers to recover. These were booby-trapped with grenades. Tripwire-activated flares were also emplaced in the barriers. These burned for about a minute, illuminating an area of 300 square meters. There were protected zigzag routes through the barriers, allowing patrols to pass through. Recovering supply pallets that had missed their target or enemy dead from within the barriers was a dangerous assignment. The barriers were difficult to maintain, with breaches caused by artillery and mortars having to be repaired, additional barriers added in some sectors, and grass burned off. The protective barriers around the various hilltop positions were not as extensive as those at KSCB; they would often consist of just one or two belts of single or double concertina wire, and it was almost impossible to clear all the vegetation. Mines and booby traps gave additional protection to these positions.

Trenches within the base varied, but were 4–6ft deep, 1–2ft wide at the bottom, and 2–3ft wide at the top. The soil was sufficiently stable that few of the trench sections required strengthening with sandbags. The spoil from the trench was heaped to either side and the parapet raised with between one and three layers of sandbags, usually laid with their long edge perpendicular to the trench. Rain and the coming and going of personnel soon smoothed out the parapets, blending them into the surrounding ground. The trenches were not zigzagged or dug to any geometric pattern; rather they could more accurately be described as “winding.” At 30–50ft intervals shelters were erected to provide instant access to cover from enemy barrages. These shelters were constructed by building a three-sandbag-high, three-sandbag-thick wall on the trench front. A speed pallet or runway matting panels⁹ were laid over the trench, sloping towards the rear, and two or three layers of sandbags stacked on top. Sometimes a firing port was provided.



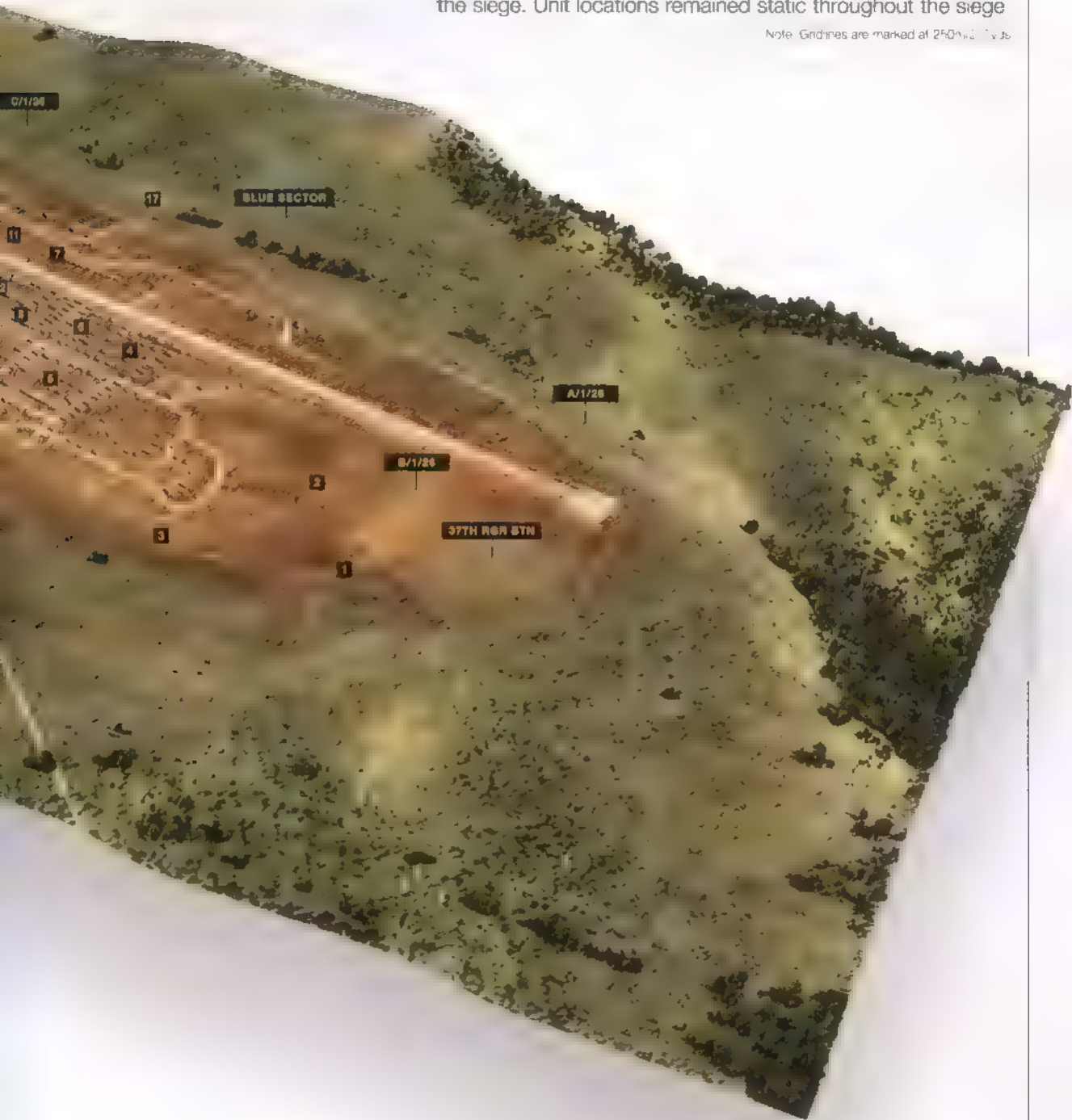
LEGEND

- 1 40mm/ 50-cal position
- 2 ASP No. 1
- 3 C/1/13 Marines (105mm)
- 4 1/26 Marines COC
- 5 USAF Forward Operating Location
- 6 Reconnaissance units
- 7 Airfield control tower
- 8 Base Exchange and Post Office
- 9 28th Marines COC
- 10 Garbage dump
- 11 Additional helicopter parking
- 12 301st Seabees
- 13 Logistics Support Unit
- 14 Charlie Med
- 15 Graves registration
- 16 Aircraft parking area
- 17 Water point
- 18 Helicopter revetments
- 19 Air freight
- 20 Motor pool
- 21 ASP No. 2
- 22 Ponderosa (old Khe Sanh SF camp)
- 23 3d Engineer elements
- 24 A/1/13 Marines (105mm)
- 25 Mortar/1/13 Marines (4.2in)
- 26 FOB-3 command bunker
- 27 Tank and Ontos laager
- 28 1st Prov Battery (155mm)
- 29 1/13 Marines CP
- 30 H&S Co, 3/26 Marines
- 31 3/16 Marines COC
- 32 FOB 3 helicopter LZ
- 33 40mm/ 50-cal position
- 34 3d Plat, Co G CAP

KHE SANH COMBAT BASE, EARLY FEBRUARY 1968

KSCB's key facilities, defense sectors, perimeter defense and tenant units are indicated on the view of the base during the early phase of the siege. Unit locations remained static throughout the siege.

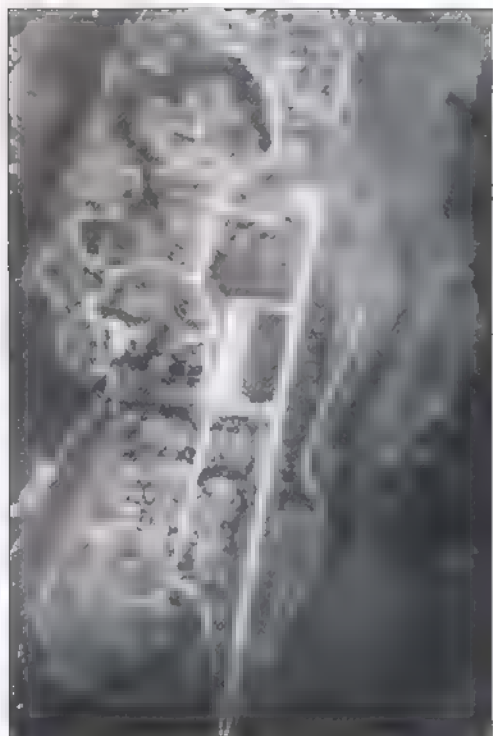
Note: Gridlines are marked at 250m intervals.



Fighting bunkers were more robustly constructed; an 8 x 8ft pit was dug and the interior sometimes revetted with sandbags. The walls above ground were typically three sandbags thick. If the fighting bunker was one of those protecting the perimeter, a firing port was built in. To provide additional support, timbers (6 x 6in) were placed in each corner, with a fifth in the center. A speed pallet or runway matting served as the roof with two or three layers of sandbags stacked on top. This sort of bunker provided basic protection from 82mm mortars. U-shaped barbed-wire picket posts were often used as horizontal roof supports, and layers of packed earth and additional layers of sandbags were added along with plastic sheeting to provide a degree of waterproofing. Used 105mm howitzer and 106mm recoilless rifle cartridges were driven into the earth and into sandbag cover overhead with their rims touching, in order to detonate shells before they penetrated the bunker. Engineers with power tools could construct a bunker like this in three or four days; infantrymen needed a couple of days more.

Combat operations centers, fire-control centers, and other key facilities were housed in bunkers with at least twice the normal thickness of overhead cover. They would, nevertheless, often be destroyed if the enemy scored a direct hit with a 120mm mortar, 122mm rocket, 130mm or 152mm gun, particularly if the ordnance was fitted with a delay fuse. Some key bunkers had an additional outer blast wall, three-sandbag-thick, built a couple of feet from the bunker wall itself. Sht trenches were sometimes dug inside the bunker as additional protection should the bunker collapse – a common occurrence. Wooden ammunition boxes were filled with earth and stacked as revetments. Black fiberboard ammunition packing tubes and steel 155mm propellant bag tubes were also filled with earth and used as revetments, held in place by barbed-wire pickets, while 55-gallon fuel drums, again filled with earth, served as bunker walls. Some tents and wood-frame barracks had been erected previously, the latter roofed with corrugated sheet metal, but these were mostly destroyed and their materials salvaged. Building materials were sometimes in such short supply that guards had to be posted at night to prevent pilfering.

Critics complained that the Marines at Khe Sanh failed to entrench with sufficient thoroughness, blaming this deficiency on their normal role as assault troops and a natural aversion to defensive operations. Although this was undoubtedly true to a degree, this judgment was largely based on the observations of reporters who visited the base prior to the siege and during the build-up. The original garrison was a single battalion and the fortifications reflected this. More units poured in during the build-up but it took time to construct their positions, a situation often exacerbated by the slow arrival of materials, with ammunition and rations taking priority. Lumber in particular was in short supply and attempts to cut down local trees proved futile as they were so peppered by fragments from earlier fighting they damaged the chainsaws. C4 plastic explosive was used to fell trees to clear fields of fire and these were used for bunker materials, but there was a limit on how much C4 could be expended in this way. The wood had not been seasoned, and as such rotted quickly and fell prey to termites. The Marines dug feverishly and continued to improve positions during the siege, with deeper trenches and thicker overhead cover.



A more vertical view of KSCB providing a better view of its west end, though part of the Red Sector is cut off at the top of the photograph. FOB-3 compound is in the upper left. The KC-130F wreck of February 10 can be seen just below the west turnaround pad. Snaking out from the central portion of the north Gray Sector perimeter is the water point road. The dark area is the brush-covered stream gorge.

A typical hill position was 881S, occupied by elements of 3/26 for 113 days from December 26, 1967. Hill 881S was a dome-shaped hill with two peaks, the easternmost slightly higher than the west, the ridge fingers jutting out from the hillside. An oval perimeter trench encircled both peaks, with the area around the eastern hilltop being larger and more elongated. The hill had five helicopter landing zones (LZ) scattered across it. The eastern portion of the perimeter was defended by 1/3/26 with three 105mm howitzers, two 81mm and three 60mm mortars, and contained the main ammunition bunkers. M/3/26 defended the west peak with two 106mm recoilless rifles and three 60mm mortars. 1/3/26 commander, Capt William H. Dabney, had overall command of both companies. M60 and .50-cal machine-gun bunkers dotted the perimeter. On the saddle between the peaks was another LZ, and trenches linked the defended areas on both peaks. The hill trenches often had to be heavily strengthened with sandbags owing to the less stable condition of the soil. Troops dug slit trenches into the back wall of existing trenches, covering these "bunny holes" with airfield matting and sandbags, and 55gal drums with their ends cut out were laid end to end in ditches running downhill to provide drainage, as regular

culvert piping was not available. A belt of concertina wire and mines surrounded the entire position. Wire repairs and the laying of mines and trip flares continued constantly. An access trail led west, down the slope out of the western perimeter. The slopes of the hill had been blasted clean of vegetation. Some 40 Marines would die on 881S, and over 150 more fall victim to wounds during the course of the siege; this despite the hill position never being the target of a ground attack. Nominally defended by 400 troops, the garrison sometimes fell as low as 250 because of the slow replacement rate. As the Marines themselves put it, there were two ways to get off the hill. "You're either flown off or blown off." Another example of the firepower of a Marine position is Hill 861, which had two 4.2m, two 81mm, and three 60mm mortars, plus a 106mm recoilless rifle.

Khe Sanh Combat Base had an elongated, irregularly shaped, trenched perimeter ("trenchway highway"), oriented east-southeast to west-northwest. It was some 2,500 yards long, averaging 400 yards wide, with the west end 650 yards across, occupying 2 square miles. The 3,895ft-long, 60ft-wide runway ran parallel with the north perimeter, situated less than 100 yards inside it and, on its eastern end, stretching some 150 yards beyond the perimeter. This narrow gap was covered by machine guns, Claymores, two Ontos vehicles loaded with flechette rounds, and pre-registered mortar concentrations, while booby-trapped concertina coils were strung at night. A turnaround pad was situated at both ends of the runway and a 150 x 600ft parking area was located south of the runway near the east end. Six soil-filled, steel-faced helicopter revetments were located on the other side of the runway from the parking area. When damaged by shell or mortar fire, the runway's aluminum AM2 matting was quickly repaired, with the damaged panels removed (some were salvaged for use in fortifications),

the crater backfilled with packed earth and rock, and replacement panels laid.

The perimeter was divided into three sectors, thinly defended by 1/26 Marines. Blue Sector paralleled the runway's north side. Red Sector ran around the bulbous west end of the base, with FOB-3 linked in to the east. Gray Sector ran from behind FOB-3 along the south side and curved around the east end. The 150 x 650 yard FOB-3 compound was more heavily bunkered than the rest of KSCB and had its own helicopter LZ. The 37th ARVN Ranger Battalion occupied an outer perimeter at the east and southeast ends of KSCB. The west and east ends were considered the most likely points of attack and 1/9 Marines was dug in at the Rock Quarry 550 yards beyond the main perimeter's west end. References often depict this as a large kidney-shaped position extending over half a mile to the southwest with an outpost on Hill 64¹⁰. Instead it was a small cluster of interlinked positions and outposts around the quarry. The Hill 64 outpost was later withdrawn. The 200 x 300 yard drop zone (DZ) was situated between the main perimeter and 1/9 Marines. This location protected the DZ and allowed airdropped supplies to be recovered easily. The accuracy of the drops and the secure nature of the DZ avoided the problems with recovery of supplies experienced at Dien Bien Phu. The few supplies that were dropped outside the secure DZ were often recovered, but mortars and air power destroyed those that were not.

Khe Sanh's sole source of water was from an unnamed stream running parallel with and 150 yards outside the north perimeter. Water was pumped 800ft up an incline to rubber reservoirs beside the runway, and then to a small water tower. When the pumps failed or the reservoirs were under repair, water details using M76 Otter tracked carriers hauled 5gal water cans back to the base.

1 The French lost 11 x 120mm, 2 x 105mm, and 1 x 155mm weapons in the first two days.

2 Includes rounds fired on hill outposts.

3 Viet Minh claim they fired 350,000 rounds.

4 Most hills were identified by their elevation in meters above sea level.

5 Montagnard is the French term for "mountaineer," and referred to the planter/gatherer tribesmen of the Bru tribe indigenous to the uplands of Indochina. They lacked a written language and the Vietnamese referred to them as Moi ("savages").

6 The 12-man A-team was the basic Special Forces operating element employed to organize and train battalion-size indigenous Civilian Irregular Defense Group (CIDG) Camp Strike Forces.

7 West German-designed razor wire was made of galvanized spring steel with double-pointed, razor-like barbs. A coil was 40in in diameter and stretched out to approximately 50ft. The older spring steel concertina with twisted barbs remained in use.

8 These were half a 55gal steel drum buried in the ground at an angle, filled with jellied gasoline, with the top sealed. They were command-detonated by a Claymore firing device. A C4 charge blew the fuel 20 or more yards outward and it was ignited by a thermite grenade wired into the electrical firing system.

9 The 463-L speed pallets measured 8 x 9ft and AM2 matting panels 2 x 12ft. The M8 pierced steel planking from the old runway was left on the base and the planks, measuring 1 x 12ft, were also used.

10 in this case its name was not based on its elevation.

CHRONOLOGY

PRE-1967

July 1962 Special Forces camp established at Khe Sanh.

April 1964 Marine Signal Engineering Survey Unit conducts communications intelligence collection in area.

April 1966 1/1 Marines conducts Operation *Virginia* in Khe Sanh area, yielding few results.

October 1966 1/3 Marines commences operations in Khe Sanh area.

December 21, 1966 Khe Sanh Special Forces camp relocates to Lang Vei.

1967

March 19 QL9 opened between Dong Ha and Khe Sanh.

April 20 3d Marines commences Operation *Prairie IV* in Khe Sanh area.

April 24 Contacts with NVA north of Hill 861 and the Hill Battles commence.

April 28 2/3 Marines seizes Hill 861.

May 2 2/3 Marines seizes Hill 881S.

May 4 NVA attacks Lang Vei Special Forces Camp.

May 5 2/3 Marines seizes Hill 881N.

May 13 Hill Battles are terminated. 1/26 Marines occupies KSCB. Hills 881S, 861, and 950. Operation *Crockett* commences.

July 16 Operation *Crockett* terminated.

July 17 Operation *Ardmore* commences with little action.

August 17 Khe Sanh airfield closed for restoration and expansion.

mid August QL9 cut by NVA.

September 2 3/26 Marines departs KSCB.

September 27 New Lang Vei Special Forces Camp opened closer to Laotian border.

October 27 Khe Sanh airfield re-opened.

October 31 Operation *Ardmore* terminated.

November 1 Operation *Scotland I* commences.

December 13 3/26 Marines returns to KSCB.

December 21 Evidence of NVA build-up found in Khe Sanh area.

1968

January 2 At least two NVA divisions in Khe Sanh area.

January 15 Operation *Niagara* commences to provide massive air support to KSCB.

January 16-17 2/26 Marines arrives at KSCB and occupies Hill 558.

January 20 KSCB placed on Red Alert due to pending major NVA attack.

January 20/21 NVA conducts major assault on Hill 861. NVA commences operations to ensure QL9 remains cut.

January 21 Massive NVA artillery, rocket, and mortar attack on KSCB destroys ASP 1. Khe Sanh village seized by NVA.

January 22-23 1/9 Marines arrives and takes position in Rock Quarry west of KSCB.

January 23-28 Large numbers of refugees are evacuated from KSCB by air.

January 27 37th ARVN Ranger Battalion arrives at KSCB.

January 30/31 Communists launch nationwide Tet Offensive. First B-52 strike delivered at Khe Sanh.

February 1-25 The battle for Hue, one of the key cities in northern South Vietnam.

February 5 Elements of 2/26 secure Hill 861A. The NVA conducts major assault on the position.

February 7 Lang Vei Special Forces Camp falls to a combined tank/infantry assault by NVA units.

February 8 The outpost west of the Rock Quarry is almost overrun and is withdrawn.

February 10 KC 130F crash lands at KSCB and C 130 landings are suspended on the 12th. Airdrop and low altitude parachute extractions (LAPES) become the base's primary means of resupply.

February 21 NVA units probe 37th Ranger Battalion lines.

February 23 The heaviest day of shelling at KSCB: 1,307 rounds strike the base.

February 25 A Marine patrol ambushed south of KSCB suffers heavy losses.

February 29–April 1 NVA regiment attempts to position itself to attack 37th Ranger Battalion.

March 6 C-123 transport aircraft shot down approaching KSCB.

March 7 Large numbers of refugees evacuated from KSCB by air.

March 10 Provisional Corps Vietnam established, subordinate to II MAF and responsible for Operation *Pegasus*.

March 23 Heaviest day of shelling for March: 1,109 rounds.

March 25 Preliminary reconnaissance by 1st CavDiv for Operation *Pegasus* begins.

March 31 Operations *Scotland I* and *Niagara* terminated.

April 1 Operation *Pegasus* commences with 1st CavDiv, 1st Marines, and ARVN units.

April 4 2/5 Cavalry secures Old French Fort and Khe Sanh village.

April 5 1/9 Marines repulses NVA counterattack on Hill 471.

April 6 2/12 Cavalry relieves 1/9 Marines on Hill 471.

April 8 2/7 Cavalry links up with 26th Marines, officially lifting the siege.

April 9 US troops secure Lang Vei. Khe Sanh airfield declared open to all aircraft.

April 11 QL9 is officially opened to Khe Sanh. 37th Ranger Battalion departs.

April 14 3/26 seizes Hill 881N.

April 15 Operation *Pegasus* is terminated. Operation *Scotland II* commences with 3d Marines (terminated February 28, 1969).

April 18 26th Marines deployed to Quang Tri City and Dong Ha.

May 13 Peace talks between the US, South Vietnam and North Vietnam commence in Paris.

June 19 Elements of the 1st and 9th Marines begin Operation *Charlie*, the dismantling and evacuation of KSCB.

July 5 KSCB officially closed.

July 6 KSCB evacuated and Operation *Charlie* completed.

July 11 Last action in the Khe Sanh area when 1st Marines engages NVA near Hill 689.

PRELUDE

THE HILL BATTLES, APRIL-MAY 1967

The siege of Khe Sanh Combat Base was not the first battle fought between the NVA and the US and ARVN allies on the Khe Sanh plateau. With the realization that Free World military operations and pacification efforts in the northern provinces were gradually eroding their previously hard-won footholds in the region, the NVA decided to attack the exposed and highly defended base in an effort to reverse this trend. The communist infrastructure that had been so carefully and painstakingly established was unraveling in many areas. The NVA began to build up its strength in areas north of the DMZ and in Laos in mid 1966, an initiative that would eventually draw steadily more American and ARVN units away from the population centers of South Vietnam to the border regions, requiring Free World forces to spread themselves more thinly.

In April 1967 Khe Sanh was the most northwest outpost of Free World forces in South Vietnam. It was undeveloped, possessing only an airstrip, and a variety of Free World units were scattered across the plateau. These included a Special Forces camp at Lung Vet manned by Civilian Irregular Defense Group (CIDG) troops, a Regional Force company and a Marine Combined Action Program (CAP) company at Khe Sanh village, a Marine battalion at the airfield, and an MACV-SOG FOB at the Old French Fort outside Khe Sanh village. QL9 had been re-opened by the Marine 11th Engineer Battalion on March 19, but this road link was tenuous.

The perimeter bunker line connected by trenches. Some of these are fighting bunkers, some living bunkers, and others are a combination. Most have at least three-sandbag-thick overhead cover, which provided sufficient protection from 60mm and 82mm mortars.





NORTH VIETNAMESE ARMY UNITS AND EVENTS

A 4 Battalion, 95C Regiment attempts to seize Hill 881 during 20/21 January assault and is repulsed by K/3/26 Marines and elements of A/1/26 and D/1/26.

B Unidentified NVA platoon probes west perimeter 21 January and is repulsed by L/3/26 Marines.

C Unidentified battalion, 325C Division attempts to seize Hill 881A during 6 February assault, which partly overruns the position, but is repulsed by E/2/26 Marines.

D Unidentified battalion, 101C Regiment attempts to seize Hill 84 (Outpost Alpha 1) during 8 February assault and is barely repulsed by 1st Platoon, A/1/9 Marines. The outpost is abandoned the next day.

E Unidentified NVA company probes east perimeter on 21 February and is repulsed by the 37th ARVN Ranger Battalion.

F Unidentified battalion, 86 Regiment attempts to assault the east perimeter on 1 March and is repulsed by the Rangers (seven subsequent light probes are conducted in following weeks).

G Unidentified battalion, 86 Regiment attempts to assault the east perimeter on 18 March and is repulsed by the Rangers.

US MARINE CORPS UNITS AND EVENTS

* Indicates US position. (squares 1-8)

1 Hill 881S defended by I/3/26 Marines plus two platoons and M/3/26 Command Group.

2 I/3/26 Marines attempts two-prong attack on Hill 881N, 20 January, and is repulsed. This was the only significant Marine offensive operation during the siege.

3 Hill 881 defended by K/3/26 Marines plus two platoons A/1/26, and one platoon D/1/26.

4 Hill 881A defended E/2/26 Marines, which occupied it on 5 February.

5 Hill 558 defended by 2/26 Marines (- E/2/26).

6 Hill 950 radio relay site defended by 2d Platoon, A/1/26 Marines.

7 Rock Quarry defended by 1/9 Marines, which occupied it on 23 January.

8 Hill 84 defended by 1st Platoon, A/1/9 Marines, which occupied it on 23 January until withdrawn on 8 February after a heavy attack.

BATTLE FOR THE HILLS, LATE JANUARY-EARLY FEBRUARY, 1968

Most action in the vicinity of KSCB focused on the Marine outpost hills to the north of the base.





With the American flag flying defiantly above it, what appears to be a heap of discarded ammunition tubes and 55gal drums is actually the combat operations center for I/3/26 Marines on Hill 8816. The 4.2in mortar ammunition tubes are earth-filled and serve as bullet and fragmentation deflectors for personnel entering and exiting the underground bunker. Barbed-wire pickets hold the stacked tubes in place, but appear to have taken some mortar hits.

1st Battalion, 3d Marines (1/3) had deployed to the area at the end of September 1966 to conduct Operation *Prune*. It patrolled out as far as 6,500 yards from the airfield, very slightly more than the maximum range of NVA 120mm mortars. Patrols were soon extended to 11,000 yards. Operation *Prune* was wound down at the end of January 1967, having produced few contacts with the enemy. 1/3 Marines departed and a reinforced Company B, 1st Battalion, 9th Marines (B/1/9) garrisoned the airfield with the artillery of Battery I/3/12 Marines. NVA activity began to increase in the area in late February and continued to do so into March. A misdirected air strike struck Khe Sanh village in early March, and this "friendly fire" killed over 100 civilians and wounded over 200. The Marines did conduct relief efforts in the aftermath of this tragedy. At the same time the NVA units mortared the airfield, damaging helicopters. They also probed the defenses around the base. The 3d MarDiv, responsible for northern I CIZ, reinforced Khe Sanh with E/2/9 and stepped up patrolling.

On March 16 a major firefight took place, resulting in 19 Marines KIA and 59 WIA, and some helicopter losses. In response two tanks, three Ontos, two quad .50-cal vehicles, and two twin 40mm "Dusters" were sent to Khe Sanh. E/2/9 Marines, which had suffered most of the losses, was withdrawn and Battery F/2/12 replaced I/3/12. The 3d Marines (Col John P. Lanigan), operating to the east of Khe Sanh, was made responsible for the area in which fewer than 1,000 US and Vietnamese troops were operating at that point. B/1/9, conducting a sweep on April 24, was involved in a minor engagement on Hill 861, beginning what came to be known as the Hill Battles or First Battle of Khe Sanh. The first day's action cost the Marines 14 KIA and 17 WIA, strongly indicating that the NVA were marshalling forces to overrun the lightly defended Khe Sanh, in order to win a combined military and propaganda victory.

The NVA plan was to isolate the base, destroy the helicopters based there, cut QL9 and conduct diversionary attacks on Marine bases to the east and Lang Vei Special Forces Camp. The 18 NVA Regiment, attached to 325C Division, would attack KSCB from the northwest. The diversionary attacks on Camp Carroll, Con Thien, Dong Ha, Gio Linh, and Phu Bai were carried out on April 27-28 as planned, despite the enemy plan having been compromised.

Infantrymen of G/2/3 Marines work their way up the blasted south slopes of 881S during the April-May 1967 Hill Battles.



K/3/3 was helicoptered into Khe Sanh on April 25 and advanced on Hill 861 to join B/1/9 in clearing the feature. The 3/3 Command Group (LtCol Gary Wilder) was in charge of the operation. The terrain was difficult and resistance strong, and K/3/9 was choppered into KSCB as reinforcement. On the morning of the 26th, 3/3 Combat Operations Center (COC) and KSCB were struck by heavy mortar attacks and the NVA occupied Hill 881S in strength. Fighting continued all day on Hill 861, with close-range ambushes initiated by the NVA, and the three Marine companies withdrew at nightfall. In a glimpse of what the future would hold, US and ARVN action was hampered by dense vegetation, fog, and heavy rains.

Realizing that 3/3 was facing a large force scattered over a wide area, 3d MarDiv committed 2/3 Marines (LtCol Earl R. DeLong), which was conducting operations on the coast north of Hue. The battalion was airlifted to Khe Sanh on the afternoon of the 26th and immediately deployed into the hills. The next day 3/3 pulled back to the base to receive replacements and resupply, and 2/3's fourth company arrived along with artillery reinforcement. Air power and artillery, including 175mm guns firing from the Rockpile, softened up Hill 861 throughout April 28. Marine fighters slammed 250lb and 500lb bombs into Hill 861 to blast away foliage. With the stoutly built NVA bunkers now exposed, they were attacked individually with 750lb, 1,000lb, and 2,000lb bombs.

The 3d Marines launched its assault in the afternoon of April 28 with Hill 861 as Objective 1, 881S Objective 2, and 881N Objective 3. Leading off was 3/2, which ascended Hill 861 to find the NVA had withdrawn. On the bare hilltop the Marines found 25 bunkers and 400 foxholes, and 3/3 prepared to take 881S the next day. The going the next morning was slow, but before noon Marine elements were in contact with NVA patrols. The battalion's intermediate objective, a small hill mass 750m northeast of 881S, was secured before nightfall. The night was uneventful as 881S was pounded with artillery and air strikes.

On the morning of April 30, 3/3 moved out toward 881S while 3/2 departed 861 to secure an attack position to the west of 881S. Soon 3/2 was engaging a bunker complex and was forced to pull back; 3/3 was



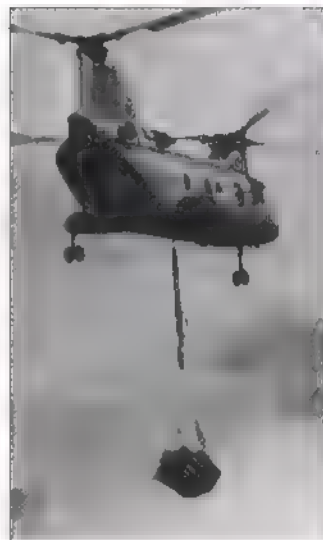
The Hill Fights. Though large areas were blasted almost clear of the dense vegetation, the fallen trees and tangled limbs coupled with the naturally rugged hillsides and cratered ground made cross-country movement extremely difficult.

also heavily engaged and pulled back. It was now apparent that 881S was very heavily defended. The battalions suffered a combined total of 52 KIA and 152 WIA, but enemy losses were at least three times higher. On May 1, 881S and 881N were plastered with massive aerial and artillery barrages. M 3/3 had suffered so many casualties it was flown back to Dong Ha. Some 106mm recoilless rifles were brought forward to engage the bunkers with direct fire, and 3/3 assaulted 881S on the morning of May 2, securing the hill in the early afternoon. It had been abandoned by the NVA. They found 250 bunkers, of which 200 had been destroyed by air strikes and artillery. Sometime around May 1, the battered NVA 18 Regiment was replaced by the fresh 95C Regiment, 325C Division.

Since April 28, 2/3 had been clearing the area northwest of Hill 861 in preparation for the 881N assault. Moving out on the morning of May 2, the hill was assaulted from the south and east in the late morning. Using artillery support, the crest was gained, but a sudden heavy rainstorm and high winds made effective control of the position impossible, and the Marines were forced to pull back to defensible terrain for the night. Before dawn on May 3, as the Marines prepared to again assault 881N, the NVA hit them with a counterattack. The position held by E/2/3, on a small hill 500m south of 881N, was penetrated and a vicious hand-to-hand fight ensued. The penetration was contained by dawn, and the rest of the day was spent clearing the enemy lodgment, further delaying the 881N attack. The Marines lost 27 dead and 84 wounded, but 137 NVA dead were left in the area.

It was learned from the three prisoners that were taken that another attack was planned for the night of May 3. The battalion closed into a tight perimeter on the south slope of 881N. Wire, Claymores, and trip flares were flown in and the battalion waited. Instead of the NVA attacking 881N, they struck the Lang Vei Special Forces Camp 10km to the south in the early hours of May 4. This attack had been planned by the NVA as a diversion for a larger attack on Khe Sanh. Even though the Marine actions in the hills had undermined the main attack, the Lang Vei assault was launched anyway. It had no impact on the Hill Battles, but showed that the NVA was more widely deployed in the area than had been realized. The camp was almost overrun, but held out. Two US Special Forces (USSF) were killed along with 20 CIDG, with another 37 CIDG either captured or deserted. The 2/3 spent May 4 moving further up 881N as the hill was prepared for an assault by air strikes and artillery. The assault was finally launched on the morning of May 5. Encountering heavy resistance, the battalion pulled back and again blasted the hill. This forced the NVA to withdraw and the hilltop was secured by mid-afternoon.

For the next three days there was little contact with the NVA as both battalions patrolled the area. Aerial observers reported enemy elements withdrawing north and west. Patrolling continued and efforts were made to pursue enemy rearguards. On May 9 a two-platoon patrol engaged an enemy force. The patrol was beyond radio range, but its fire requests were relayed through another unit. Helicopters flew in mortars and recoilless rifles and helicopter gunships hit the enemy, turning the NVA withdrawal into a rout. The Marines lost 24 KIA and 19 WIA, however. The last action of the Hill Battles was on May 10 when a 3d Reconnaissance Battalion patrol was engaged and extracted with great difficulty.



Helicopter support as well as fixed-wing transports were critical to sustaining Khe Sanh and the hill positions during the siege. Here a Marine CH-46A Sea Knight, or "Purple Fox" medium cargo helicopter lifts off from Khe Sanh to deliver a sling-load of ammunition to one of the hill positions.

While the Hill Battles were only company- and battalion-sized actions, it had been a tough fight. The Marines suffered 155 KIA and 425 WIA, and lost a number of helicopters. These losses were significant enough that some companies were withdrawn during the action and rebuilt. Marine Aviation delivered 1,900 tons of ordnance and the artillery over 25,000 rounds, while B-52s flew 23 strikes against the surrounding area. The Hill Battles were the first major actions in which the Marines used the 5.56mm M16 rifle, which had replaced the 7.62mm M14. There were widespread problems with the weapon jamming, caused both by improper cleaning and defects in the weapon's design, which were later corrected.

The planned NVA attack on KSCB had been foiled and the body count confirmed that it had lost at least 940 dead (total losses may have been as high as 1,500). It would be almost six months before 325C NVA Division was again ready for major operations.

Marine forces in the Khe Sanh area were scaled down beginning on May 11, and on May 13 the 26th Marines (Forward), under Colonel John J. Padley, relieved the 3d Marines at KSCB and Operation *Crockett* began. Only 1/26 Marines was present with a small regimental command group on the base. A company fortified Hill 861 and Hill 881S, with a platoon securing the radio relay site on Hill 950. Patrols were conducted to a distance of 4,300 yards from the positions, while Company A, 3d Reconnaissance Battalion, patrolled further out. Contacts indicated elements of 325C Division were still in the tri-border region. June saw increasing enemy probes and mortar and rocket attacks. One engagement west of 881S on June 6 cost the Marines 18 dead and 28 wounded, while NVA losses were at least 66 confirmed KIA. Because of increasing enemy activity, 3/26 Marines arrived on June 13. Early on the morning of June 27 two mortar and rocket attacks on KSCB left ten dead and 139 wounded. Activity petered out and Operation *Crockett* was terminated on July 16 with 52 Marine KIA and 255 WIA. NVA losses were over 200 confirmed dead.

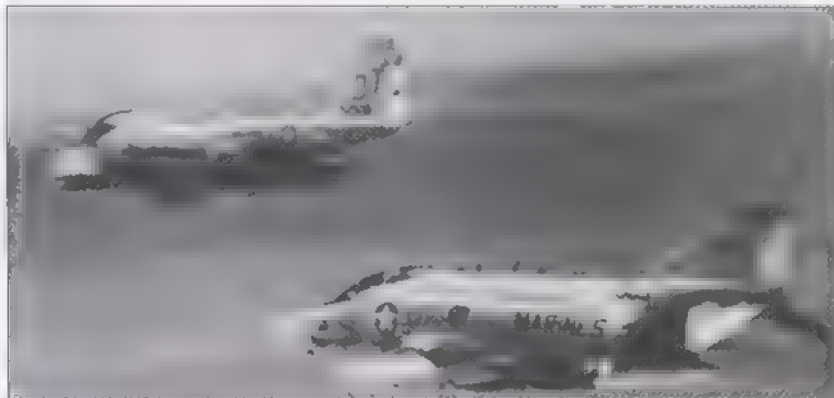
On July 17 Operation *Ardmore* began, but there were few contacts and the operation was ended on October 31. During this period Marine and NVA losses were relatively light at ten and 100 respectively. From mid-August to late October the Khe Sanh airfield was closed while it was refurbished and extended by Naval Mobile Construction Battalion 10; this was just at the point that the NVA managed once again to cut QL9. Colonel David E. Lownds took command of the 26th Marines on August 12, and on September 2 3/26 Marines departed the area. At the end of September the Lang Vei Special Forces Camp was relocated closer to the Laotian border. November 1 saw the start of Operation *Scotland I*, the defense of the Khe Sanh area. On December 13, 3/26 Marines returned to KSCB as a response to renewed NVA activity.

OPPOSING PLANS

THE NORTH VIETNAMESE PLAN

In April 1967 the North Vietnamese Politburo and Central Military Party Committee conducted assessments of the feasibility of launching a major campaign to achieve a decisive victory in South Vietnam. The decision was made in June to execute what would become the Tet Offensive¹¹. The plan called for widespread attacks throughout the country focusing on urban areas, which they considered the enemy's weakest points. Preparations were made by sending cadres south to coordinate the operation with NVA and VC units and, by October, supplies had been stockpiled along the Ho Chi Minh Trail using over 5,000 trucks. Additional units, including sappers, were sent south along with new weapons. Plans were firmed up in October, at the same time that additional US units began deploying to Vietnam, and the final go-ahead was given in January 1968, just before the planned launch date. In late December, however, the US became aware of the build-up of forces in the Khe Sanh area. This did not deter NVA plans and indeed may have been part of the preparations for Tet, aimed at drawing troops away from the urban centers.

The US command interpreted the increasing movement of NVA units and supplies into Quang Tri as an effort to create another Dien Bien Phu at Khe Sanh. The deception worked in the NVA's favor as the US focused on remote northwestern Quang Tri, allowing NVA units to move into position near Dong Ha, Hue, and other Tet Offensive targets more easily. The four NVA divisions, and considerable additional forces, committed to Quang Tri had the mission of tying down as many Free World forces as possible in what was envisioned as a General Offensive-General Uprising (*Tong Kong Kach Long Khoi Nghia*). It has since been postulated that the General Uprising was as much as anything an effort by the North



Absolutely essential to the defense of Khe Sanh was close air support provided by a variety of Marine, Navy, and Air Force fighter-bombers. Here a Marine Grumman A-6A Intruder and McDonnell-Douglas F-4B Phantom II head for an air strike. Fully loaded, these two aircraft alone could each carry more 500lb bombs than four World War II B-17 bombers.

Vietnamese to eliminate the VC as a political/military force in its own right within South Vietnam. This result would enable North Vietnam to avoid dealing with an independent South Vietnamese nationalist movement once victory was achieved. Previous battles had taught the NVA that the US Forces' superior firepower and mobility meant it could not win a conventional engagement. This was confirmed in mid 1967 by the battles for Dak To, Song Ba, and Loc Ninh. In response, the NVA switched many of its Tet targets from US to ARVN units.

On the night of January 20, elements of, from west to east, 304, 325C, and 320 Divisions would conduct attacks to ensure the road route to Khe Sanh along QL9 remained closed. The 325C Division would conduct operations to the northwest and north of Khe Sanh, although its 95C Regiment and 8 Battalion, 29C Regiment, were deployed to the east. The 304 Division was to the southwest and south, while 320 was in support, with most elements north of the Rockpile to the northeast of Khe Sanh, and 324B further north in the DMZ as a reserve. The first attack on KSCB's hill position would take place at the same time. The following day (January 21) would see the opening artillery barrages on Khe Sanh.

The actual intentions of the NVA in northwestern Quang Tri remain unknown. Even *Victory in Vietnam: The Official History of the People's Army of Vietnam, 1954-1975* fails to provide any insight into their objectives. Nguyen Van Mai of the Politburo stated, "We will entice the Americans close to the border and bleed them without mercy." It is suspected, because operations there began ten days prior to the launch of the Tet Offensive, that their primary goal was to draw in forces and tie them down both at Khe Sanh and in efforts to re-open QL9. While significant US air and logistical resources were required to support Khe Sanh, no effort was made to open QL9 until after the Tet Offensive had been blunted.

Even less is known of the actual designs on KSCB, which the NVA called Ta Con after the nearest Montagnard village. Was the plan actually to overrun the base, winning a tremendous political and psychological victory that would have the same resounding effects as the triumph at Dien Bien Phu? Or was it merely to surround the base and draw and hold Free World forces there? Hindsight suggests the most likely scenario is the latter. Two woefully under-strength divisions, enduring a constant pounding from Free World forces, were hardly adequate to carry the base.

The NVA were focused on mobile combat (*danh van dong*) and the idea of siege warfare was just as distasteful to them as defensive warfare was to the Marines. Trenches were dug toward the base's east end and south side, however, beginning in mid February. This was perhaps to strengthen the impression of an impending assault. Numbers of 60mm¹² and 82mm mortars were moved within range of the base and well dug in and concealed. A 12.7mm antiaircraft machine gun platoon protected each mortar platoon. Troop positions and supply dumps scattered through the hills were thoroughly dug in and in some cases suffered less damage than expected from air and artillery.

If the NVA's intention was an assault to overrun the base, it missed its best chance in the period January 20-22, when the main ammunition dump had been destroyed, the runway damaged, before the hill positions were fully developed, before 1/9 Marines was fully dug in at the Rock Quarry, and before the 37th ARVN Ranger Battalion arrived.



Airborne-delivered sensors played a key role in the defense of Khe Sanh, here an Air-Delivered Seismic Intrusion Detector (ADSID). There were several versions, and could detect the vibration of troops moving (seismic) or be activated by the sound of voices and movement (acoustic). Monitoring stations picked up the signal, and the general area in which the sensor had been planted was saturated by artillery and air strikes.

Hindsight is a marvelous thing, but nonetheless NVA efforts to assault the base did seem feeble. Only two significant attacks were conducted on hill outposts during the entire siege, both of which came close to success, Hill 861 on January 20 and 861A on February 5. It is often said that American firepower prevented the NVA from conducting a major assault, but at this early stage the full weight of that firepower had not yet been brought to bear and the NVA was not as yet overly affected by it. If 861 had been seized early on, it is possible that the NVA would have made a more serious attempt to attack the base. Why it did not make a serious attempt on 861 is unknown, but does suggest that their aims may have fallen short of the actual capture of the base.

Of particular interest is that the NVA made no effort to destroy Khe Sanh's reservoirs or contaminate the base's water supply, the source of which was in NVA-controlled territory. If they had done so it would have been necessary for 258 tons of water to be delivered daily, exceeding the 235 tons of other daily cargo that was difficult enough to deliver. Just as puzzling is the fact that the NVA never cut the telephone line linking KSCB to the outside world, nor made serious efforts to destroy the radio relay site on Hill 950 protected by a solitary platoon. Nor were significant antiaircraft units moved into the area. There were large numbers of light antiaircraft weapons, but none larger than 37mm, and the concentration was not nearly as heavy as during the 1973 siege of An Loc. The numbers of US and South Vietnamese aircraft lost and heavily damaged were comparatively small. While Lang Vei Special Forces Camp and Khe Sanh village were overrun, the number of determined attacks on the outposts was small. Assault trenches were sapped to within 100 yards or less of the base's perimeter, but these were not nearly as numerous as those dug at Dien Bien Phu. The number of probes was limited and the only actual ground attacks on the main perimeter were conducted over a month after the siege commenced and fell far short of the expected human wave attacks, being conducted by fewer than 100 men. If the NVA had been serious about taking the base they would

surely have assaulted it as early as possible rather than wait and allow their manpower and ammunition to be whittled away.

The artillery, rocket, and mortar fire directed against Khe Sanh and the outposts was relatively light, averaging 150 rounds per day, barely exceeding 1,000 rounds even on the days of heaviest bombardment. Total expenditure amounted to just over 11,000 rounds, including 5,000 122mm rockets. At Dien Bien Phu the French were the target of over 2,000 rounds on many days, Corregidor received 16,000 rounds in a single day in WWII, and a tiny US hilltop outpost in Korea once took 14,000 rounds in a day. While artillery dominated the battlefield, the actual amount employed was probably not all that high.

While it appears there was no firm plan to overrun the base, no doubt the NVA were prepared to attempt to do so if the opportunity arose. The NVA intentions to overrun the base or otherwise certainly did not change what its defenders endured and were prepared for. It was a seemingly unending battle, 24 hours a day for 77 grueling, mind-numbing days. It was even worse for the NVA enduring constant artillery and aerial bombardment, the heaviest inflicted during the war. The logistical effort to sustain NVA forces was an even greater endeavor than the siege itself.

The first NVA use of armor in combat in South Vietnam took the form of PT-76 light amphibious tanks committed to the assault on Lang Vei. The Americans failed to interpret how these tanks would be employed. It was expected that they would be utilized in the assault on the main base and the Marines were well prepared for such an eventuality, being armed with 90mm gun tanks, 106mm recoilless rifles, 3.5in bazookas, M72 light antitank weapons (LAW), and antitank mines. However, the NVA had decided not to employ them against the main base because they would have been easy prey for the American tanks and Ontos antitank vehicles. Instead, they were first used against a Laotian battalion to drive them across the border, and then against Lang Vei Special Forces Camp.

The 1st Offensive had spent itself by the end of February, although NVA units were still in the process of disengaging. NVA units were first detected withdrawing from Khe Sanh on March 15, but this process probably began earlier. The withdrawal quickened as the relief forces drew steadily nearer to Khe Sanh, although the fighting was far from over. March 23 saw a heavy shelling of KSCB and there were still sharp engagements around the base, as well as opposition to the relief operation. Probes, patrol engagements, and shelling continued until the Americans evacuated Khe Sanh on July 6.

THE AMERICAN PLAN

Regardless of its exposed location, Gen William Westmoreland, US commander in Vietnam, desired to maintain a presence at Khe Sanh as a position from which to conduct operations against the Ho Chi Minh Trail and as a reconnaissance launch site. He felt it was essential to maintain an intelligence collection capability in the tri-border area. In December 1967 the Free World presence at Khe Sanh was limited, with only a reinforced Marine company backed by an artillery battery, a CIDG camp strike force at Lang Vei, a Regional Force company in Khe Sanh village, and a



Micro-management from the highest level. Secretary of Defense Robert S. McNamara briefs President Lyndon B. Johnson, leaning over the Khe Sanh terrain board in the White House Situation Room.

Command and Control North (CCN) launch site in the form of FOB-3. To make matters worse, these small units were scattered over a wide area, making mutual support impossible. QL9 had been closed west of Ca Lu since August, leaving air power as the only means of reinforcement and resupply.

Because of its remoteness, unfavorable weather conditions, and proximity to NVA supply lines, Khe Sanh would be a difficult position to maintain. In 1966, III MAF conducted a map exercise of the defense of Quang Tri Province after which Westmoreland questioned why the defense plan had not included Khe Sanh. The Marines argued the remote area was not defensible, or at least not worth the logistical effort of doing so.

Another reason Khe Sanh was to be retained was for its eventual incorporation into the ill-conceived "Demarcation" Strongpoint/Obstacle System, known to posterity as the "McNamara Line." This was planned as a line of barriers, mines, belts of cleared land, and remote sensors backed by artillery strongpoints and mobile forces. Its development and the construction of strongpoints had begun in 1967. Many military leaders felt all it achieved was to tie down units in static positions rather than allowing them to exploit their superior mobility. In addition the barrier could simply be outflanked through Laos, even though remote sensors were to "cover" that area.

When an NVA build-up was detected in December 1967, the Marines began to reinforce KSCB and continued to do so until shortly after the siege began. In preparation for increased operations there, and acknowledging the fact that QL9 was cut and would be extremely costly to re-open and maintain, Khe Sanh airfield had been renovated and extended in August and September. The monsoon began in October. Operation *Ardmore*, the defense of the Khe Sanh area, was terminated and Operation *Scotland I* began on November 1 with the same mission. Intelligence collection efforts in the area were increased as the weather deteriorated, using ground patrols, aerial reconnaissance, radio intercept, infrared aerial photography, and helicopter-borne "people sniffers."

Reinforcements were sent in once the decision was made to hold the base. External long range artillery support was to be provided by Army

175mm guns at the Rockpile and Camp Carroll. Marine, Air Force, and Navy carrier aircraft would support the base and Air Force transports and Marine helicopters would supply it as part of Operation *Niagara*. Sufficient airlift was available to keep the base supplied, though more was requested: Boeing C-130E Hercules of the 315th Air Division, Fairchild C-123K Providers and De Havilland C-7A Caribous of the 834th Air Division, and Marine KC-130Fs. Weather, almost as significant a factor as NVA artillery, would be the deciding factor on the effectiveness of this air power.

Some urged that Khe Sanh be abandoned rather than allowing the Marines to become bogged down in a siege in a remote position difficult to supply and hampered by bad weather. The highest US authorities directed that Khe Sanh be held, however, "because it afforded an opportunity to draw large enemy forces to battle, then destroy them with a combination of superior firepower and a counterthrust into Laos." The counterthrust never took place. The similarity of this statement to the French concept of the defense of Dien Bien Phu further fueled the endless media comparisons of the two actions. Westmoreland said, "We will lure the enemy to their deaths," in a statement strikingly similar to Nguyen Van Mai's. The US understood early on that a large relief effort would be necessary to eventually open QL9. What was not realized at the time of the decision to hold Khe Sanh was that the Tet Offensive would delay that relief. The insistence on holding Khe Sanh, and undertaking whatever effort was necessary to ensure it would not fall, distracted American attention from other areas.

The Khe Sanh defense plan was simple and straightforward. This type of static warfare was repugnant to the Marines and most in the Marine chain-of-command disagreed with the concept, but Westmoreland prevailed. Being primarily an assault force, their mentality and doctrine called for aggressive offensive operations. A single Marine battalion and the many small support detachments defended KSCB itself. A single rifle company was held in reserve. The dug-in tanks and Ontos were concentrated at the base's west end during the day, but some would move to different perimeter sectors at night. A

The Marine commanders overseeing the defense of Khe Sanh, from left to right: MajGen Rathvon McC. Tompkins, Commanding General, 3d MarDiv; Gen Leonard F. Chapman, Commandant of the Marine Corps; MajGen Louis Metzger, Assistant Commander, 3d MarDiv; and LtGen Robert E. Cushman, Commanding General, III MAF. The occasion is MajGen Metzger's January 1968 promotion. Metzger's tour of duty was soon completed and he was replaced by BGen Jacob E. Glick (not pictured).



quad 50-cal and a Duster were positioned near each end of the base. An understrength ARVN Ranger battalion was dug in on the east end, the most likely direction of a ground assault. FOB-3 secured part of the south perimeter. Another Marine battalion was positioned outside the west end of the perimeter in the Rock Quarry, another likely direction of attack. It also secured the DZ. Lung Vei Special Forces Camp and light indigenous defenses at Khe Sanh village provided dubious protection of the southwest approach from Laos along QL9. Hills 881S, 861, and 950, a radio relay site, were already occupied by Marines. The hill outposts were considered essential to the defense. Hill 558 and the surrounding area were occupied just before the siege commenced in January. A composite artillery battalion was positioned on the base itself with three 105mm howitzers on 881S. Hill 881S and 861 denied the NVA rocket and artillery firing positions, while 558 blocked the approach through the Rao Qung gorge.

For the most part Marine patrols were restricted from straying further than 500 yards outside their perimeter because of the density of enemy troops and the difficulties of supporting and extracting them if they became strongly engaged further out. On the eve of the NVA attack 1st Brigade, 101st AbnDiv, and 3d Brigade, 1st CavDiv, were ordered to be prepared to deploy to I CTZ at 24 hours' notice and then to air-assault into Khe Sanh or an adjacent area. Both brigades were helicopter-borne airmobile units. Basically the defense plan was for the Marines simply to hold until relieved. Until Operation *Pegasus* began there was little in the way of maneuver by either side. Planning for this relief operation had originally been begun by the 1st CavDiv in late January, but its commitment to Hue and other operations countering the Tet Offensive operations delayed the relief's implementation.

11 Tet Nguyen Dan - Festival of the Lunar New Year beginning on January 30 in the South Vietnamese calendar and January 31 in the North Vietnamese calendar.

12 The Chinese 60mm was referred to by the US as the "61mm" based on the theory that, as with the Soviet/Chinese 82mm, US 81mm ammunition could not be fired from it. Both US and Chinese 60mms can in fact fire each others ammunition.

OPPOSING COMMANDERS

AMERICAN COMMANDERS

Military Assistance Command, Vietnam, the senior US joint command in Vietnam, was directed by **Gen William C. Westmoreland**, a position he held from 1964 to 1968. For more direct control of operations in far away I CTZ during the Tet Offensive, MACV established a sub-headquarters, MACV Forward on February 9, 1968 at Phu Bai. **Gen Creighton W. Abrams**, Deputy Commander, MACV, had direct supervision over III MAF. On March 10, MACV Forward was dissolved and its assets used to form Provisional Corps, Vietnam, under **LtGen William B. Rosson**, former Deputy Commander, MACV Forward. Provisional Corps was subordinated to III MAF and made responsible for the relief of Khe Sanh. In August this command was consolidated with XXIV Corps newly arrived in Vietnam.

LtGen Robert E. Cushman, Jr. (USMC) was Commanding General, III MAF, responsible for US operations in I CTZ. He oversaw the defense and relief of Khe Sanh. Born in 1914, he graduated from the Naval Academy near the top of his class and was commissioned in the Marine Corps in 1935. He served in China with the 4th Marines and was assigned to various Marine barracks and the USS *Pennsylvania* until joining the 9th Marines in 1942. He served as a battalion commander for two years fighting on Bougainville, Guam, and Iwo Jima. His awards for valor included the Navy Cross. After the war he served in various school assignments and then on higher staffs as well as with the CIA. He took command of the 2d Marines in 1956, then served four years as Assistant to the Vice President for National Security Affairs (Richard Nixon). In 1961 he became the assistant commander of the 3d MarDiv, and then the commander. For the next two years he held various staff assignments at Headquarters, Marine Corps, then held the dual assignment of commanding Camp Pendleton and 4th MarDiv. He organized and commanded 5th MarDiv in 1967 and was then assigned as Deputy Commander, III MAF. He was promoted to lieutenant general in June 1967 and assumed command of III MAF, at the time the largest combined force ever led by a Marine. He commanded the force until March 1969 and then served as Deputy Director of the CIA until becoming the twenty-fifth Commandant of the Marine Corps in 1972. General Cushman retired in 1975 and died in 1985.

MajGen Rathvon McC. Tompkins (USMC) was Commanding General, 3d MarDiv. He was born in 1912 and commissioned into the Marine Corps in 1935. In his 36 years of service he won every medal for valor except the Medal of Honor. In World War II he fought on Guadalcanal, Tarawa, and Saipan with the 2d MarDiv. He commanded the 5th Marines in the 1st MarDiv in Korea. MajGen Tompkins arrived in Vietnam in November

The key commander on the ground at Khe Sanh was Col David E. Lowndes, Commanding Officer, 28th Regimental Combat Team (Reinforced). He sports the handlebar mustache he wore throughout the battle as well as a 10lb 3oz M1955 armored vest or "flak jacket," worn virtually round the clock by all on the base.



1967 and assumed command of the 3d MarDiv, which he commanded until May 1968. He retired in 1971 and died in 1999.

Col David E. Lownds (USMC). Commanding Officer, 26th Marines, was born in 1920 in Massachusetts. Commissioned in the Marine Corps in 1942, he fought as a platoon commander in the 4th MarDiv on Roi-Namur, Saipan, and Iwo Jima. Wounded on several occasions, he left the Marines at the end of 1945. He was recalled as a reservist in 1950 for the Korean War and served in staff assignments in the 2d MarDiv. After the war he served in a variety of staff positions from battalion to Headquarters, Marine Corps, including operations, intelligence and executive officer, and as a reserve unit inspector-instructor. In 1958 he took command of 3-8 Marines. In 1964-65 he was the plans officer for 2d MarDiv and then the Marine force operations officer during the 1965 Dominican Republic intervention. He went to Vietnam in July 1967 to assume command of the 26th Marines on August 12, which he commanded throughout the defense of Khe Sanh until April 18, 1968, when Col Bruce F. Meyers relieved him. He was awarded the Navy Cross for his efforts. He soon retired and now resides in Florida.

Battalion-level commanders at Khe Sanh from January 20-April 1, 1968:

1st Battalion, 9th Marines	LtCol John F. Mitchell (to March 31) LtCol John J.H. Cahill
1st Battalion, 13th Marines [artillery]	LtCol John A. Hennelly
1st Battalion, 26th Marines	LtCol James B. Wilkinson (to February 29) LtCol Frederick J. McEwan
2d Battalion, 26th Marines	LtCol Francis J. Heath, Jr.
3d Battalion, 26th Marines	LtCol Harry L. Aderman (to March 14) LtCol John C. Studt
Forward Operations Base 3	Maj Lucius J. Campbell (to undetermined date February) Maj David C. Smith (to undetermined date March) LtCol Roy W. Bahr
37th Ranger Battalion	Capt Hoang Pho (ARVN)

NORTH VIETNAMESE COMMANDERS

The Route 9-Khe Sanh Front Command was established by the NVA in December 1967 to control the operation around KSCB. It was under the command of **MajGen Tran Quy Hai**, Assistant Chief of Staff, People's Army of Vietnam (PAVN) General Staff. He was one of the original Viet Minh officers, commanding infantry units during the war with France. Prior to becoming Assistant Chief of Staff, PAVN General Staff, he mainly held rear service and air-defense roles, experience that served him well during the Khe Sanh campaign. After the war he served in military justice assignments and retired in 1980.

The Front political commissar was **Le Quang Dao**, Deputy Director of the General Political Directorate, PAVN. He was a member of the Central Committee and was previously deeply involved with operations in Laos. After the war he was responsible for military youth organizations. **MajGen Tran Van Quang** was the commander of Tri-Hien Front with **MajGen Le Chuong** the political commissar.

Col Tran Tho, the Deputy Operational Commander, held a major responsibility for logistics. He retired as a major general responsible for

Two AN/TPQ-10 radars of Marine Airfield Traffic Control Unit 62 used to guide aircraft to their target. This radar emitted a beam that locked onto the aircraft. With data provided by the Fire Support Control Center the controller transmitted the targeting information with the enemy position, ordnance ballistics, wind speed and direction, and other necessary data. At a computer-calculated predetermined release point the controller directed the pilot when to release his load. In the foreground is a fire truck displaying minor fragmentation holes. Its windshield and other windows removed because of fragmentation damage.



rear services. Senior Col Nguyen Song Sy, former Deputy Director of the General Rear Service Department, took command of Group 559 (a specialist supply formation) prior to the siege.

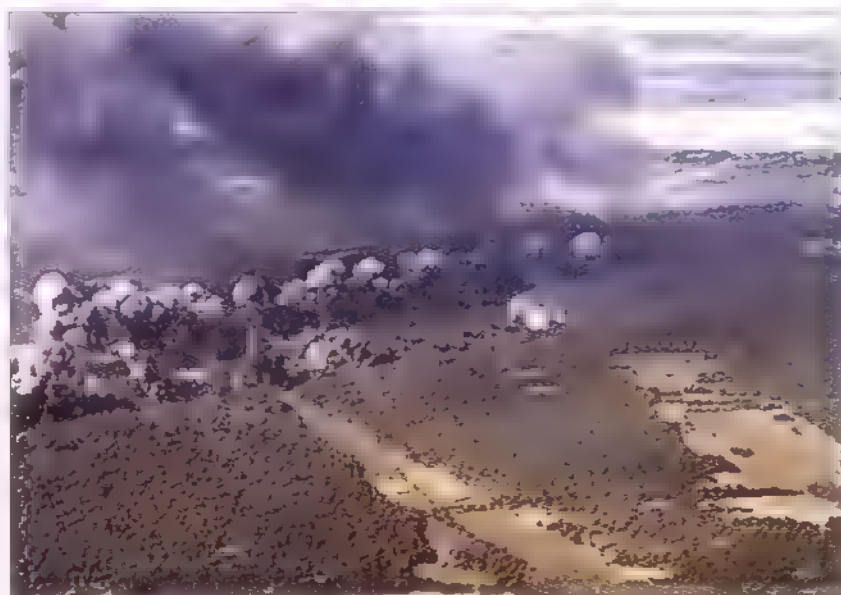
Nothing is known of the NVA division and lower echelon commanders. It can be assumed divisional and regimental commanders were experienced veterans of the war with France, tough, and dedicated to the cause. PAVN officers by necessity had to be ideologically motivated. They operated in a dual-command system down to company level with a political commissar part of the decision-making process. The system had its flaws, but because of the degree to which it was integrated into the armed forces and all aspects of North Vietnamese life, such an arrangement was essential in the view of North Vietnam's Communist Party. The strong mix of ideological integration, unorthodox military education and development, and the involvement in a lengthy and difficult war where self-sacrifice was an everyday occurrence, all shaped the nature of the NVA's officers. They were categorized as "careerists," those emphasizing military skill and familiarity with military technology, or "devotees," those devoted to and totally enmeshed in the Party's cause and placing hopes on complete loyalty to that cause.

OPPOSING FORCES

FREE WORLD FORCES

All US forces in the Republic of Vietnam were under US Military Assistance Command, Vietnam (MACV), led by Army general William C. Westmoreland. South Vietnam was divided into four areas, designated Corps Tactical Zones (CTZ) numbered I to IV from north to south. These corps zones had been organized by the ARVN, but US forces basically overlaid their command arrangements on them. I CTZ encompassed South Vietnam's five northernmost provinces and US forces in the zone were under the control of III Marine Amphibious Force (III MAF), a corps-level command that also controlled US Army units. Free World military forces in Vietnam were not under a combined integrated command; US and Vietnamese forces operated under their own commands, though they were closely coordinated and ARVN units were often placed under US control.

III MAF controlled the 1st and 3d MarDivs plus the Army's 1st Cavalry (Airmobile) and Americal Divisions, as well as brigades detached from the 4th Infantry and 82d Airborne Divisions. The 2d Korean Marine Brigade was also attached. Army units in I CTZ were administered and supported by a temporary command known as MACV Forward, established on February 9, 1968 as the NVA offensive continued. It became Provisional Corps, Vietnam, on March 10 and was assigned to the relief of Khe Sanh.



Two strings of bombs march from left to right delivered during a B-52D "Arc Light" strike. Dropped from 40,000ft, the bombers were en route back to Guam on their 2,800 mile 10-12-hour round trip by the time their bombs struck. Other B-52s flew from Thailand and Okinawa.

Corporal Robert J. Arrotta
of I/3/26 Marines atop Hill 881S,
the "Mightiest Corporal in the
World," directs air strikes
against NVA positions using
an AN/PRC-41 radio.



The 1st MarDiv (1st, 5th, 7th, 11th [artillery] Marines), "The Old Breed," was headquartered at Da Nang on the coast well south of Quang Tri province. The 3d MarDiv was headquartered at Hue on the coast halfway between the DMZ and Da Nang. In March, while the siege was under way, the headquarters moved to Quang Tri City.

The 3d MarDiv (3d, 4th, 9th, 12th [artillery] Marines), "The Fighting Hurd," had been organized in September 1942. It fought on Bougainville, Guam, and Iwo Jima and was deactivated at the end of 1945. It was reactivated in January 1952 and stationed in Japan. In 1956 it relocated to Okinawa where it remains to this day. It served in Vietnam from May 1965 to November 1969 and was responsible for operations at Khe Sanh.

The primary Marine unit at Khe Sanh was the 26th Marines, "The Professionals," actually a regiment assigned to the recently reactivated 5th MarDiv in California, but attached to the 3d MarDiv since April 1967. With the California-based 1st MarDiv and Okinawa-based 3d MarDiv both in Vietnam, the 5th MarDiv (13th [artillery], 26th, 27th, 28th Marines), "Spearhead Division," was reactivated in March 1966 to serve as a Pacific contingency force. Nevertheless, two of its regiments would fight in Vietnam. The 5th MarDiv had originally been activated in January 1944, fought on Iwo Jima, its only combat operation, performed occupation duty in Japan, and was deactivated in February 1946.

The 26th Marines had originally been activated in January 1944. After fighting on Iwo Jima it was detached from the 5th MarDiv and assigned to occupation duty in Japan, followed by the Palau Islands, and was deactivated in March 1946. It was reactivated in March 1966 at Camp Pendleton, California, and the 1st and 2d Battalions deployed to Vietnam in August 1966, attached to the 3d MarDiv. The 3d Battalion arrived in November and the regimental headquarters, which had been on Okinawa since August, deployed to Phu Bai in April 1967, leaving a rear detachment on Okinawa. Designated 26th Regimental Landing Team (Forward), the unit conducted several operations in northern I CIZ through 1967. 1st Battalion garrisoned KSCB in May 1967, relieving the 3d Marines after the Hill Battles. The 3d Battalion arrived at Khe Sanh in

June and the 2d Battalion in January 1968. The 26th RLI was the primary unit occupying KSC B and the northern hill positions during the siege.

Another participant in the battle was 1st Battalion, 9th Marines, known as "The Walking Dead" due to their lengthy service in Vietnam. The 9th was one of the Corps' older regiments having first served from 1917-19. It was reactivated in February 1942 and assigned to the 3d MarDiv until deactivated in December 1945. The "Striking Ninth" was briefly reactivated from 1947-49. When reactivated again in March 1952 it was assigned to the 3d MarDiv and the 1st Battalion arrived in Vietnam in June 1965.

The 3d Marines was the major player in the Hill Battles, augmented by elements of the 9th and 26th Marines. The 3d Marines had originally served from 1916-22. It was reactivated once more in June 1942 to operate alongside the 9th Marines with the 3d MarDiv, and deactivated in January 1946. Reactivated in 1947, it was again deactivated in 1949. It was reactivated in June 1951 because of the Korean War, assigned to the 3d Marine Brigade and then the 3d MarDiv, with which it has served ever since. Arriving in Vietnam in April 1965, it was the first Marine regiment deployed there.

In 1968 a Marine infantry regiment¹⁹ had a 222-man regimental headquarters company with a regimental headquarters, company headquarters, scout-sniper platoon, and communication platoon. The three 1,649-man infantry battalions each had four 216-man rifle companies and a 385-man headquarters and service company. The H&S company was organized into a battalion headquarters, company headquarters, and communication, service, antitank (8 x 106mm M40A1 recoilless rifles), and mortar (8 x 81mm M29 mortars) platoons plus a flamethrower section (8 x M7-2 flamethrowers), the latter seldom manned in Vietnam.

A rifle company had a nine-man headquarters and a 66-man weapons platoon with machine gun (6 x 7.62mm M60 machine guns), antitank (6 x 3.5in M20A1B1 bazookas), and mortar (3 x 60mm M19 mortars) sections. Its three 47-man rifle platoons had a five-man headquarters and three 14-man rifle squads armed with M16 rifles and a single 40mm M79 grenade launcher.

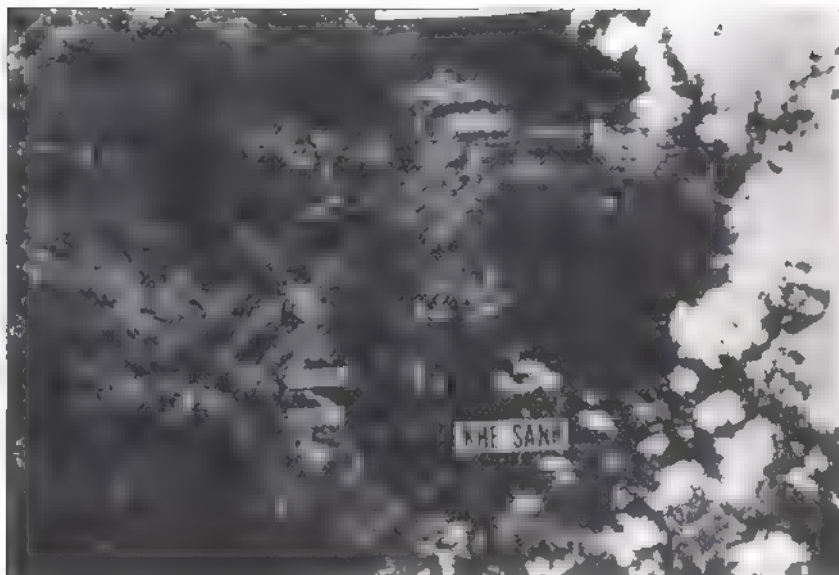
A regimental landing team was habitually task-organized with a number of supporting units attached, and the 26th RLT was no exception. It was heavily augmented by additional units not normally attached to support the regiment and the base. Appended combat units included 1st Battalion, 13th Marines with its three 105mm batteries and a battery of 4.2in mortars augmented by 1st Provisional 155mm Howitzer Battery. All batteries had six artillery pieces and all were deployed in KSCB itself, with the exception of three Battery C 105mm weapons located on Hill 881S and two 4.2in mortars on Hill 861. The Marines in the base and surrounding outposts had at least 32 x 81mm and 48 x 60mm mortars at their disposal, plus a few of each in FOB-3 (which also had a 4.2in mortar). The 37th Rangers had four 60mm, one 81mm, and one 106mm rifle. There were six 90mm gun-armed

Artillery and Mortars at Khe Sanh

Weapon	Range meters (feet)
United States	
60mm M19 mortar	2,000 (6,500)
81mm M29 mortar	3,660 (11,500)
4.2in M30 mortar	5,500 (18,000)
105mm M101A1 howitzer	11,000 (36,000)
155mm M114A1 howitzer	12,950 (42,500)
175mm M107 self-propelled gun	32,700 (107,000)
NVA	
60mm Type 31 and 83 mortars	1,630 (5,000)
82mm BM37 mortar	3,000 (9,800)
120mm HM43 mortar	5,700 (18,700)
122mm D74 gun	24,000 (79,000)
130mm M46 gun	27,500 (90,000)
152mm D20 gun-howitzer	17,265 (57,000)
107mm Type 63 12-tube rocket launcher	8,500 (28,000)
122mm DKB 1-tube rocket launcher	10,000 (33,000)

Mortar notes: The NVA used some captured US 81mm M1 and M29 mortars as well as 60mm M19 mortars, while the Marines used a few captured 82mm BM37 mortars with US ammunition.

The angular dotted white lines are "Arc Light" bomb swathes crisscrossing around Khe Sanh. Hills 881N and 881S are indicated, as is KSCB, the base encircled in black below and to the right of the label.



M48A3 Patton tanks, three each from 2d and 3d Platoons, Company B, 3d Tank Battalion. Company A (-), 3d Antitank Battalion (soon redesignated Antitank Company, 3d Tank Battalion) had two platoons, each with five M50A1 Ontos antitank vehicles each armed with six 106mm recoilless rifles. There was, in addition, an array of small reconnaissance, communication, engineer, motor transport, shore party (essentially stevedores), medical (manned by Navy personnel), logistical, and service detachments.

Four Navy Mobile Construction Battalion (Seabee) detachments provided most of the engineer support. Army units included signal, smoke, and AN/MPQ-4 countermortar radar detachments, plus a composite automatic weapons platoon with two M42A1 "Duster" self-propelled dual 40mm antiaircraft guns and two 2½ ton M35A2 truck-mounted quad .50-cal M55 machine guns. Additional fire support was provided by Army 175mm self-propelled guns of Battery A, 8th Battalion, 4th Artillery, and Batteries B and C, 2d Battalion, 94th Artillery, at Camp Carroll, and Battery A, 2d Battalion, at the Rockpile.

FOB-3 was the most northwestern base employed by MACV-Studies and Observation Group's (MACV-SOG), Command and Control North (CCN). This highly classified operation conducted reconnaissance and small-scale strike operations inside Laos, North Vietnam, and South Vietnam, mainly targeting the Ho Chi Minh Trail. While largely manned by US Special Forces (USSF), SOG was not a component of the in-country 5th Special Forces Group, but a joint unconventional warfare task force directly under MACV control. FOB strength varied during the siege, but included 131 USSF and other Americans and 457 indigenous Special Commando Unit personnel - Chinese Nungs, Cambodians, Montagnards, and Vietnamese. Besides staff and support personnel, FOB had a large number of reconnaissance teams (two USSF, six indigenous personnel), a few Spike Teams (three USSF, nine indigenous) for reinforcing and aiding in the extraction of recon teams, and a Hatchet Team (six USSF, 32 indigenous) to hit targets of opportunity discovered by the recon teams. FOB units also performed

bomb-damage assessment and conducted communications intercept operations. FOB-3 was augmented by rotating 1st Special Forces Group 12-man A-teams from Okinawa.

FOB-3 was on the south side of the base and actually just outside it, linking the Red and Gray Sectors. Originally an FOB-1 launch site had been established at Khe Sanh village in 1966, but it moved into the moated Old French Fort in the summer of 1967 and became FOB-3 in September. Immediately before the siege, FOB-3 began to build a new and very well-protected compound, completed in mid February 1968, on the south side of base. Its facilities were comparatively comfortable and boasted amenities only dreamed of by the Marines. It included a large helicopter LZ to launch and recover its teams. Reconnaissance operations were reduced during the siege, but still continued into Laos. Special helicopters would arrive to pick up recon teams and insert them across the border. The Marines distrusted the indigenous commandos and were suspicious of the Green Berets, accusing them of "being a law unto themselves." No indigenous personnel could enter KSCB at any time, and American FOB personnel could only enter the base in daylight. In addition, the Marines placed wire barriers, mines, and fighting bunkers on the perimeter behind the FOB, fearing the indigenous commandos would switch sides.

Another element placed in FOB-3 included Marines, Company O, 3d Combined Action Group along with Huong Hoa District Headquarters evacuated from Khe Sanh village. Company O's three CAP platoons consisted of about a dozen Marines and a similar number of Montagnard Popular Force troops.²⁴

The 37th ARVN Ranger Battalion (Tiêu-Đoàn 37 Biệt Động Quân) arrived on January 27 and was deployed around the east and southeast ends of the base outside Gray Sector. Again the Marines maintained defensive positions behind the Rangers due to a basic lack of faith in the ARVN soldiers. It appears that the NVA also thought the Rangers might be suspect as they deployed a reinforced NVA battalion in front of them and the only actual NVA assaults on the base struck the Rangers' positions. In their defense the ARVN Rangers repulsed every attack with ease. Other than the four U.S. advisors, water and supply details, and wounded men, ARVN Rangers were not allowed to enter Marine lines. The 37th had seen a great deal of action throughout I CTZ since its formation in 1964 and was far below its authorized strength of 646. The battalion had a headquarters company (headquarters, reconnaissance, and heavy weapons platoons, the latter with a 106mm recoilless rifle, an 81mm mortar, and two M60 machine guns) and four 80-90-man rifle companies, each with three 20-25-man platoons with an M60, plus a weapons section with a 60mm mortar and an additional M60.

Overall strength at Khe Sanh fluctuated with casualties and replacements while FOB-3 and the 37th Ranger Battalion were often not included in the totals. The various supporting detachments numbered



A Marine battalion had eight 106mm M40A1 recoilless rifle mounted on M274A1 "Mechanical Mule" ½-ton weapons carriers. Fitted atop the 106mm is a .50-cal M8C spotting rifle, using different ammunition than the .50-cal machine gun. It allowed the gunner to accurately adjust his aim before firing the main gun. The "One-Oh-Six" was used for supporting and suppressive fire, countermortar, and countersniping.

only a few hundred additional men. The Marine battalions were 300-400 men below strength. The strength of the major units at Khe Sanh in late January is detailed below:

HQ Company, 26th Marines (Forward)	191 ¹²
1st Battalion, 26th Marines	1,301
2d Battalion, 26th Marines	1,254
3d Battalion, 26th Marines	1,279
1st Battalion, 9th Marines	1,192
1st Battalion, 13th Marines [artillery]	397
Forward Operations Base 3	588
37th Ranger Battalion	318 ¹³

The 1st CavDiv (Airmobile) under MajGen John J. Tolson III would play a prominent role in the relief of Khe Sanh, Operation *Pegasus*. It was essentially a light infantry division with three organic aviation battalions and three companies, providing it with unprecedented battlefield mobility and aerial firepower. Almost 350 UH-1 Huey, C-47 Chinook, OH-6 Cayuse, and UH-1 attack helicopters allowed it to lift one third of its infantry battalions at a time. Its nine infantry battalions bore traditional cavalry designations, 1st Battalion (Airmobile), 7th Cavalry, for example.

NORTH VIETNAMESE ARMY

The People's Army of Vietnam (PAVN), or NVA, was a conventionally organized and equipped army under professional, but highly politicized, leadership. The PAVN was organized from the Viet Minh in 1954 after a successful war with France and they were by no means "guerrillas."

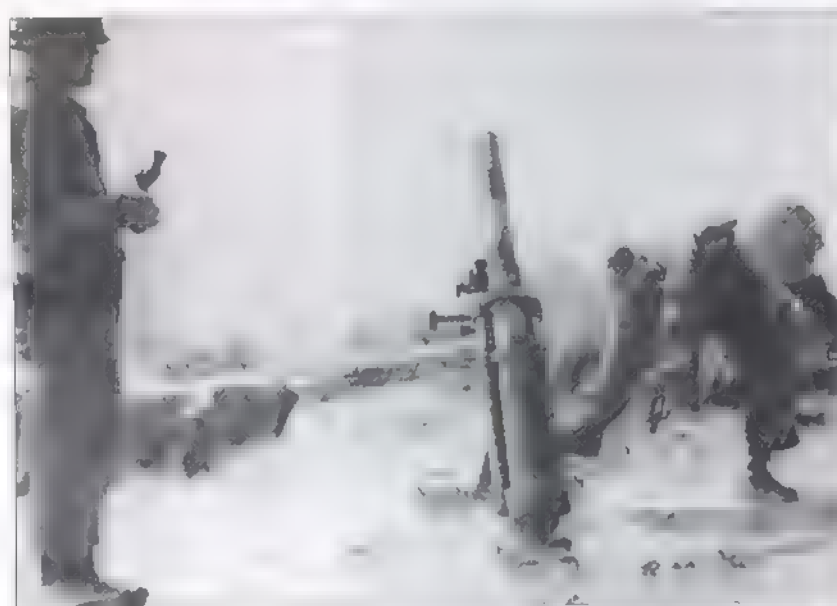
Administratively the northern portion of South Vietnam from the Central Highlands to the DMZ was known to the NVA as Military Region 5. In 1966 the NVA further subdivided the area establishing the Tri-Thien Military Region B4 ("B" was the code designation for commands in South Vietnam) to control operations in South Vietnam's two important northernmost provinces, Quang Tri and Thua Thien. At the end of 1967 the forces assigned to this front included those on both sides of the DMZ:

304 Division	675 Artillery Regiment
320 Division	208 Antiaircraft Artillery Regiment
324B Division	214 Antiaircraft Artillery Regiment
325C Division	228 Antiaircraft Artillery Regiment
270 Independent Regiment	7 Engineer Regiment
16 Artillery Regiment	198 Tank Battalion
45 Artillery Regiment	independent engineer battalion
84 Artillery Regiment	independent signal battalion
204 Artillery Regiment	

In preparation for the Khe Sanh operation, on December 6, 1967 the Central Military Party Committee established the Route 9-Khe Sanh Party Committee and the Route 9-Khe Sanh Front Military Command, codenamed B5-T8. Its headquarters were located at Sap Lit in Laos west of the North/South Vietnam border. Group 559 (*Doan* 559) had been established in 1959, when construction of the Ho Chi Minh Trail was



Fifteen 105mm M101A1 howitzers were positioned on KSCB and three on 881S. Battery B, 1st Battalion, 13th Marines actually had a refurbished 105mm that the battery had used in World War II when the howitzer was known as the M2A1. Flat tires caused by fragmentation were a constant problem for crews as the unlevelled gun's accuracy would be affected and uneven recoil would throw off the aim for subsequent rounds.



1st Battalion, 13th Marines' Mortar Battery had six 4.2in (107mm) M30 mortars, two of which were on Hill 861. While short-ranged, their high blast effect made them useful for harassing and interdiction fire and working over NVA trenches. The gunner holds the mortar's sight, which is removed when firing to prevent the recoil from splitting the levelling bubble into two bubbles - "double-bubble-trouble."

begun to funnel units and supplies to the south through Laos and Cambodia. This strategic rear services organization was assigned transport, engineer, antiaircraft, and communication units with over 25,000 troops. It was instrumental in sustaining the Khe Sanh front.

The primary divisions assigned to the front were 304 and 325C Divisions. The 320 and 324B Divisions would support the operation; 304 and 320 Divisions were among the original six NVA divisions (304, 308, 312, 316, 320, and 325). The letters "B," "C," and "D" tagged onto unit designations indicated "cloned" divisions formed by the original unlettered division. This system is very confusing to order-of-battle specialists, particularly as even North Vietnamese writings sometimes omitted the letters. The 325C Division, for example, is the third division, bearing the same number as its parent 325 Division. The component regiments and other units would bear the same letter indicator. Wartime intelligence often omitted the letter from component regiments. Some

sources indicate 325C as "325" and many more list 324B as "324." It has never been ascertained for certain which is actually correct.

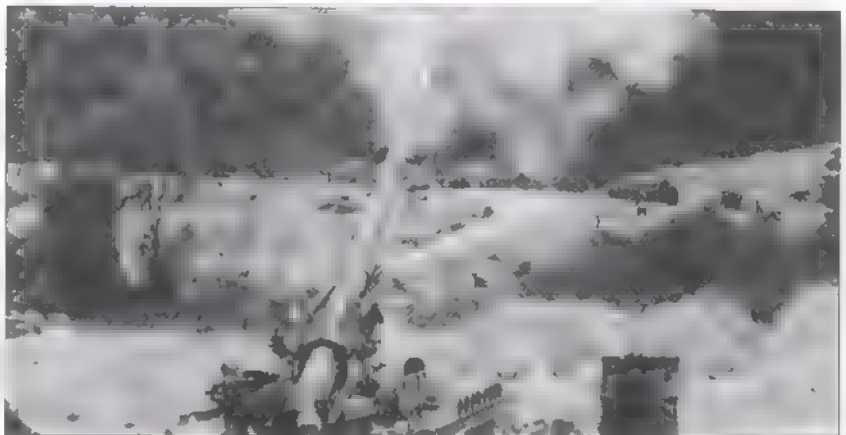
A full-strength NVA infantry division (*su đoan bo binh*) had 9,600 troops organized into three infantry regiments, an artillery regiment (or battalion in some instances), antiaircraft, engineer, signal, and medical battalions, and a transport company. The artillery regiments were mostly armed with 82mm and 120mm mortars. Certain units stationed in North Vietnam were equipped with some conventional light artillery, but more portable weapons were substituted when they deployed to South Vietnam.

Infantry regiments included about 2,500 troops with three 600-man battalions. Most units were typically understrength, with battalions deployed to Khe Sanh numbering 400-500 men. Regardless of organization tables, NVA units' armament varied considerably as a result of long campaigning, the availability of weapons, and how they configured for specific operations. Regiments typically had a recoilless rifle company (8-12 Soviet 73mm SPG-9 or Chinese 75mm Type 52 recoilless rifles and US 57mm M18A1 or Chinese Type 36 recoilless rifles), a mortar company with 6-8 82mm mortars, an antiaircraft company with 6-10 12.7mm DShKM38/46 machine guns, plus small engineer, transport, signal, and medical companies. Rifle companies were organized into one weapons and three rifle platoons. The latter included three squads, each with a 7.62mm RPD light machine gun, an RPG-2 or -7 (B40, B41) antitank weapon, 7.62mm Ak-47 assault rifles,

The 1st Provisional 155mm Howitzer Battery was part of 1/13 Marines and provided counterbattery fire. Six M114A1 medium howitzers were assigned to the battery. Concrete firing platforms were poured for the 105mm and 155mm howitzers to provide a stable platform for more accurate shooting.



Army 175mm M107 self-propelled guns firing from the Rockpile and Camp Carroll provided counterbattery fire for Khe Sanh. This one belongs to Battery A, 2d Battalion, 94th Artillery. While the longest ranged gun in the Army's inventory, it was not the most accurate, being an area fire weapon.





and possibly a captured M79 grenade launcher. The weapons platoon would have a few 7.62mm SGM machine guns, 2-4 60mm Chinese Type 31 or 63 mortars, and sometimes a couple of 57mm recoilless rifles. There simply was no standard allocation. The fighting around Khe Sanh would see some of the first combat use of the RPG-7.

Little is known of the NVA artillery units at Khe Sanh. Units mentioned include 68, 164 and 675 Artillery Regiments, and 4 Battalion, 84, 368B, and Van An Rocket Artillery Regiments plus 24 Artillery Battalion. The confusion exists because deployed NVA units were identified by code designations and names and they were frequently changed during an operation. The artillery was under a central command, sometimes identified as 559 Artillery Group. US intelligence was unable to determine the numbers and types of artillery units or the number of weapons used at Khe Sanh, although one source mentions up to 200 guns and heavy mortars, which seems an overestimation. One National Security assessment given to the White House was nothing more than a duplication of the numbers and calibers of artillery the Viet

A less than desirable option for tankers: a pillbox. Six Marine M48A3 tanks were employed at KSCB. During the day they remained in hull-down, dug in positions near the west end of the base. At night the tanks and Ontos were moved to different sectors of the perimeter so the NVA never knew when they would face the 80mm guns with high-explosive, white phosphorus, canister, flechette, and antitank rounds. This Patton mounts a 1 million candlepower Xenon searchlight capable of infrared or white light. A 7.62mm M73 machine gun was coaxially mounted beside the main gun and normally a .50-cal was in the commander's cupola, but here it has been removed and a .30-cal M1919A4 mounted atop the cupola for more effective antipersonnel use.



The NVA infantryman was a skilled, determined, and tenacious opponent. Typically uniformed in green fatigues with a fiber pith helmet, he was lightly armed and equipped. The soldier in the foreground is armed with a 40mm (over-caliber warhead diameter is 85mm) RPG-2 (B40) rocket-propelled grenade; the RPG-7 (B41) was a much improved version. It was a marginal antipersonnel weapon, but was effective against bunkers and light armored vehicles.

NVA Divisions and Manpower, Khe Sanh Front

325C Division 7,400
29C Regiment (7, 8, 9 Battalions)
95C Regiment (4, 5, 6 Battalions)
101C Regiment (1, 2, 3 Battalions)

304 Division 9,800
9 Regiment (1, 2, 3 Battalions)
24 Regiment (4, 5, 6 Battalions)
86 Regiment (7, 8, 9 Battalions)
68B Artillery Regiment
14 Antiaircraft Battalion

324B Division 9,500
90B Regiment (7, 8, 9 Battalions)
803B Regiment (1, 2, 3 Battalions)
812B Regiment (4, 5, 6 Battalions)

320 Division 7,400
48 Regiment
64 Regiment
27C Independent Regiment

318 Division unknown strength
38 Regiment
58 Regiment
72 Regiment
246 Regiment

Minh employed at Dien Bien Phu. Considering the number of rounds fired on Khe Sanh there may not have been a great deal of artillery present, possibly only six to nine batteries at the most, plus rocket units.

Five NVA divisions were involved to varying degrees around Khe Sanh. The main assault divisions were 304 and 325C with 320 supporting, 324B in reserve, and 308 "Vanguard" later involved in resisting Operation *Pegasus*. The 304 and 320 were among the four "Steel and Iron" divisions (312 and 316 being the others) that could be committed to the south only by the PAVN General Staff. The reality is that the NVA order of battle is simply not fully known, we cannot be sure which regiments from which divisions were present. To cloud the issue, Divisions were not consistent in the designations with which they referred to their constituent regiments. Unsurprisingly, intelligence summaries and post-operation studies by different organizations and agencies are in conflict. Assessments of 325C Division range from all three regiments present to just one (18). It is surmised that other divisions sent complete battalions or replacement drafts.

Other units identified included 203 Tank Regiment with two battalions, 7 Engineer Regiment, and sapper (reconnaissance/commando) companies. Identified antiaircraft units included 74 and 75 Battalions armed with 12.7mm DShKM38/46 and 37mm M1939 weapons. The 367, 368, and 377 Air Defense Divisions north of the DMZ may also have deployed elements to the Khe Sanh area.

ORDERS OF BATTLE

Khe Sanh

US Order of Battle

Hill Fights, 24 April-13 May 1967

3d Marines (-)(+)	24 Apr-13 May
HQ Company, 3d Marines	24 Apr-13 May
2d Battalion, 3d Marines (+)	24 Apr-13 May
H&S Company (-)(+)	
Company E (+)	
Company F (+)	
Company G (+)	
Company H (+)	
Company A, 1st Battalion, 26th Marines	11-13 May
Company B, 1st Battalion, 26th Marines	11-13 May
Company C, 1st Battalion, 26th Marines	13 May
Company D, 1st Battalion, 26th Marines	11-13 May
Company E, 2d Battalion, 26th Marines	12-13 May
3d Platoon, Company B, 1st Amphibian Tractor Battalion	24 Apr-13 May
2d Platoon, Company A, 3d Antitank Battalion	24 Apr 13 May
3d Platoon, Company B, 3d Reconnaissance Battalion	24 Apr-13 May
3d Battalion, 3d Marines (-)(+)	25 Apr-13 May
Command Group	25 Apr-13 May
Company K	25-27 Apr
Company M	27 Apr-1 May
Company B, 1st Battalion, 9th Marines	25-27 Apr
Company K, 3d Battalion, 9th Marines	25 Apr-13 May
Company M, 3d Battalion, 9th Marines	29 Apr 13 May
Company F, 2d Battalion, 3d Marines	1-3 May
Company G, 1st Battalion, 26th Marines	5-13 May
Company A, 1st Battalion, 26th Marines	12-13 May

Base Defense/Reserve

Company B, 1st Battalion, 9th Marines	24-27 Apr
Company F, 2d Battalion, 3d Marines	27 Apr-1 May
Company E, 2d Battalion, 9th Marines	1-12 May
Company C, 1st Battalion, 9th Marines	4-5 May
1st Battalion, 26th Marines	12-13 May
Direct Support Artillery	
Battery F (+), 2d Battalion, 12th Marines	24 Apr-13 May
Battery B, 1st Battalion, 12th Marines	27 Apr-11 May
Battery A, 1st Battalion, 12th Marines	13 May

Siege of Khe Sanh, 20 January-1 April 1968

All Units present 20 January to 1 April unless shown otherwise

26th Marines (X+) (Regimental Landing Team 26 (Forward))

HQ Company ()

1st Battalion, 26th Marines

2d Battalion, 26th Marines

3d Battalion, 26th Marines

1st Battalion, 9th Marines

22 Jan

1st Battalion, 13th Marines (artillery)

1st Provisional 155mm Howitzer Battery

Antitank Company (-), 3d Tank Battalion

Company O, 3d Combined Action Group

Company A, 3d Shore Party Battalion

24 Jan

3d Clearing Platoon, Company C, 3d Medical Battalion

24 Jan

3d Platoon, Company D, 3d Reconnaissance Battalion

1st Platoon, Company A, 5th Reconnaissance Battalion

Other Platoon, H&S Company, 3d Motor Transport Battalion

Detachment, Company B, 3d Tank Battalion

Detachment, 1st Searchlight Battery

Detachment, 3d Engineer Battalion

Detachment, H&S Company, 3d Shore Party Battalion

24 Jan

Detachment, Company A, 9th Motor Transport Battalion

Detachment, Company B, 9th Motor Transport Battalion

Detachment, Sub-Unit No. 1, 1st Radio Battalion

Detachment, 3d Dental Company

Detachment, HQ Company, HQ Battalion, 3d Mar Div

(postal exchange, photo, air observers, staff augmentation, etc)

Detachment, Communication Company, HQ Battalion, 3d Mar Div

Detachment, 5th Communication Battalion

Detachment, 7th Communication Battalion

Logistics Support Unit, Force Logistics Command

Sub-Team No. 1, 17th Interrogator-Translator Team

Detachment 01, HQ and Maintenance Squadron, MAG 16

Detachment 01, Marine Observation Squadron 6, MAG 16

15 Mar

Detachment 2*, Air Support Squadron 3, Marine Air Control Group

18-16 Jan

Detachment, HQ and Maintenance Squadron 36, MAG 36

Detachment, Marine Air Traffic Control Unit 62, MAG 36

* Air Support Radar Team Bravo

US Navy

Detachment, Naval Mobile Construction Battalion 5

Detachment, Naval Mobile Construction Battalion 10

20 Jan-19 Feb

Detachment, Naval Mobile Construction Battalion 53

Detachment Bravo, Naval Mobile Construction Battalion Unit 30†

US Army

Forward Operations Base 3, Command & Control North, MACV SOG

Detachment A-101 (+), Company C, 5th Special Forces Group (Airborne) †

Lang Vei C DG Camp Strike Force †

101st-104th Camp Strike Force Companies †

12th Company, Pleiku Mobile Strike Force †

1st 3d Combat Reconnaissance Platoons †

† Ceased to exist 7 February

Section, Battery A, 1st Battalion (Automatic Weapons, Self-Propelled), 44th Artillery†

Section, Battery G (.50-cal Machine Gun), 65th Artillery†

Detachment, 238th Artillery Detachment (Counter mortar Radar)

22 Jan

Detachment, 1st Platoon, 25th Chemical Company (Smoke)

9 Feb

544th Signal Detachment (Tactical Communications)

Mobile Advisory Team 4 (Huong Hoa District)

Battalion Advisory Team (37th Ranger Battalion)	27 Jan
‡ Operated as a composite platoon	
US Air Force	
Operating Location AJ, 15th Aerial Port Squadron	
Detachment, 368th Transport Squadron, 366th Combat Support Group	
Detachment, 903d Aeromedical Evacuation Squadron	
Detachment A, 834th Air Division	
ARVN	
37th Ranger Battalion	27 Jan
84th Company, 8th Airborne Battalion	6 Apr
Huong Hoa District HQ	
915th Regional Force Company	20-23 Jan

Operation Pegasus, 1-15 April 1968

1st Cavalry Division (Airmobile)	
1st Squadron (Air), 9th Cavalry	25 Mar
1st Brigade, 1st Cavalry Division (Airmobile)	5 Apr
1st Battalion (Airmobile), 8th Cavalry	
2d Battalion (Airmobile), 8th Cavalry	
1st Battalion (Airmobile), 12th Cavalry	
2d Brigade, 1st Cavalry Division (Airmobile)	3 Apr
1st Battalion (Airmobile), 5th Cavalry	
2d Battalion (Airmobile), 5th Cavalry	
2d Battalion (Airmobile), 12th Cavalry	
3d Brigade, 1st Cavalry Division (Airmobile)	1 Apr
1st Battalion (Airmobile), 7th Cavalry	
2d Battalion (Airmobile), 7th Cavalry	
5th Battalion (Airmobile), 7th Cavalry	
1st Marines, 1st Marine Division	1 Apr
1st Battalion, 1st Marines	
2d Battalion, 1st Marines	
2d Battalion, 3d Marines	
3d Airborne Task Force, ARVN Airborne Division	7 Apr
3d Airborne Battalion	
6th Airborne Battalion	
8th Airborne Battalion	
26th Marines (+) at KSCB under operational control	

13 A Marine infantry regiment was designated with an identifying number only thus, 26th Marines "infantry" and "regiment" were not part of its official designation. In Vietnam the 1st, 3d, 4th, 5th, 7th, 8th, 26th and 27th Marines were infantry and the 11th, 12th and 13th were artillery. Marine battalions and even companies could be attached to different regiments and battalions as necessary.

14 Collectively called "Puff/Puffs," the Regional Forces were provincial security forces while the Popular Forces were village self-defense militia.

15 The rear detachment on Okinawa numbered 275.

16 Colonel Pho Hoang asserts he had "no less than 400 men" and that replacements for casualties were provided from Da Nang.

17 Detached to Hue.

18 Maintained supply route west of Khe Sanh.

19 Detached to eastern Quang Tri.

20 Remained in North Vietnam.

21 Attached.

THE SIEGE

ISOLATION OF KHE SANH AND OPENING MOVES

The end of December 1967 found KSCB manned by a 26th Marines jump headquarters, its 1st and 3d Battalions, a composite artillery battery, and minimal supporting elements. Six Marine tanks and ten Ontos antitank vehicles plus a pair each of Army quad .50-cal and twin 40mm Duster guns had all been there since July. In the same month, the Marines dispatched a convoy of 85 trucks and two 175mm guns to Khe Sanh. The NVA ambushed the convoy on QL9 west of Camp Carroll. Rather than endanger the big guns, they and their support were returned to Camp Carroll while the convoy continued on to Khe Sanh. The NVA cut QL9 in August, but the last US convoy making it through was in July. The actual reason for sending the 175mm guns to Khe Sanh is unknown. They would have been useless for base defense as their minimum indirect fire range was 7,200m. They would have been useful for counterbattery fire on Co Roc, but this was unforeseen at the time. It is speculated that they were intended to support MACV-SOG missions inside Laos and interdict segments of the Ho Chi Minh Trail.

With the discovery of increasing NVA activity in the area on December 21, plans were made to reinforce the base and planning for air support, Operation *Niagara*, began on January 3. The next day Westmoreland advised Cushman of III MAF, "The anticipated build-up of enemy forces in the western DMZ area provides an opportunity to plan a comprehensive intelligence collection effort and to make coordination of B-52 and tactical air strikes. We should be prepared to surprise and disrupt enemy plans for an offensive against Khe Sanh with heavy bombing attacks on a sustained basis." Seventh Air Force initiated a comprehensive intelligence collection effort and dedicated B-52s to support Khe Sanh, their first use in a tactical support role.

President Lyndon B. Johnson became almost obsessive about Khe Sanh. He was briefed daily and pored over maps and a terrain board, telling General Earl Wheeler, Chairman of the Joint Chiefs of Staff, "I don't want any damn Dinbinphoo."

Within two weeks it was determined that two NVA divisions were converging on Khe Sanh. Patrols around the base

The M50A1 Ontos (Greek for "The Thing"), commonly known to marines as the "Pig," mounted six 106mm M40A1C recoilless rifles, four with spotting rifles, and a .30-cal M1919A4 machine gun. The 8½-ton antitank vehicle had a crew of three. Counting six rounds in the tubes, only 18 rounds were carried. The rifles could be fired singly or volleyed at once. Firing high-explosive and flechette rounds the ten Ontos on KSCB would have been deadly to a massed infantry attack and were effectively used for suppressive and harassing fire.



continued to make contact. NVA sappers had cut gaps through the wire in places and re-closed them for future use. Col Lownds stated on January 10 that he expected an attack within ten days. On the 14th an eight-man patrol on the side of 881N was ambushed, losing two men. The remainder of the patrol was driven off, but the bodies were later recovered. Activity was steadily increasing. The next day 2/26 deployed from Phu Bai to Dong Ha for a new mission. Upon arrival it was notified to deploy immediately to Khe Sanh. 3d MarDiv felt Khe Sanh needed prompt reinforcement. The battalion arrived on January 16/17 and for the first time the entire 26th Marines were together since arriving in Vietnam. F/2/26 moved to and occupied Hill 558, finding it free of enemy. Most of the battalion moved in on the 17th. This position, with a large sprawling perimeter almost half the size of KSCB itself, blocked the Rao Qung gorge and a dirt road approaching KSCB from the northwest.

The hills were now defended by, from west to east (troop strengths are approximate):

881S	I/3/26 plus two platoons and M/3/26 Command Group (400)
861	K/3/26 plus two platoons A/1/26 (300)
861A	E/2/26 (200) - occupied February 5
558	2/26 - E/2/26 (1,000)
950	2d Platoon A/1/26 (50)

On January 15 Operation *Niagara* officially commenced to provide massive air support to KSCB. Before first light on the 20th, I/3/26 departed 881S to probe 881N to ascertain if the enemy occupied it in strength. The company moved up parallel ridge fingers in two columns 500 yards apart. Partway up 881N both columns were engaged by dug-in NVA. The company maneuvered to extract a pinned platoon and a helicopter was downed attempting to evacuate wounded. Though separated and taking casualties, the company fought its way to the crest, receiving artillery support from KSCB and mortar and recoilless rifle fire from the defenders on 881S. The 3d Platoon leader, 2dLt Thomas D. Brindly, "was everywhere ... moved from flank to flank slapping his men on the back and urging them on." It was largely his leadership that carried the assault troops to the crest, he was the first man to reach the top, but he was downed by a sniper and posthumously awarded the Navy

Two 2½ ton M35A2 truck-mounted quad .50-cal M55 machine guns were contributed by the Army. The combined rate of fire of the four M2 machine guns was 2,000-2,600 rounds per minute with a 1,825m maximum effective range. Normally only the two upper or two lower pairs of guns were fired at once.





The NVA also employed the 152mm D20 gun-howitzer, which still out-ranged the US 155mm by almost 5,000m.

Cross. The 3/26 Command Group helicoptered to 881S and requested reinforcement from KSCB to clear 881N, but Col Lownds denied the request and ordered 1/3/26 to break contact. He feared becoming engaged in a prolonged fight while expecting an NVA attack to unfold that night – 1/3/26 withdrew with seven KIA and 35 WIA.

A/1/26 had accepted the surrender of an NVA lieutenant outside the base's perimeter that same afternoon. He was the commander of 95C Regiment's antiaircraft company and freely provided detailed information that 861 would be attacked in force that night. KSCB and the outposts were placed on Red Alert and higher headquarters notified.

On KSCB itself, 1/3/26 and elements of 1/3/26 defended the east end of the perimeter, the Red Sector. C/1/26 and elements of A/1/26 were on the north perimeter, Blue Sector. B/1/26 defended the east end and the south side, Gray Sector. D/1/26 was in reserve in the Ponderosa area near the base's center. FOB-3 was on the south-central side along with Company O, 3d Combined Action Group. The latter's 3d Platoon was 200m south of the FOB on the edge of Ta Con village, later to be pulled inside. Several helicopters were rotated to the base and remained in revetments for immediate reinforcement, resupply, and medical evacuation support for the outposts.

The base defenses were far from ready. Recently arrived units were not fully dug in and some key facilities were not yet underground. Much of the masses of ammunition rushed to the base to build a 30-day stock were not yet under cover. Another five days' stock was to be delivered soon.

The defecting NVA lieutenant revealed that 5 Battalion, 95C Regiment was to secure Hill 1015 and neutralize the Marine outpost on nearby 950. The regiment's 6 Battalion would attack 861 while 4 Battalion would attack the west end of the base's perimeter. At the same time, 101C Regiment reinforced by 8 Battalion, 29C Regiment, would attack the east end.

On the evening of the 20th a small reconnaissance patrol on Hill 869, 3km to the southwest of KSCB, reported it was surrounded. Artillery

barrages ringed the patrol, keeping the NVA at bay, and it was later able to withdraw. At the same time events to the northwest on 861 began to unfold.

Soon after midnight some 300 NVA assaulted K/3-26 on the northwest side of 861 from close, concealed positions. The mortar-supported assault was launched so swiftly and at such close range that the Marines could not use artillery fire. Much of the company position was overrun and the commander wounded three times. The 3-26 Command Group was still on 881S since afternoon fog had grounded helicopters and they coordinated the defense operation. The Marines launched counterattacks and hand-to-hand combat was frequent. To keep their spirits up ammunition handlers bellowed the Marine Corps Hymn as they passed rounds to mortarmen. The mortars became so hot the crews used their water, then fruit juice to cool them, then urinated on the tubes. Sgt Mykle E. Stahl conducted a one-man counterattack to distract the NVA holding former Marine bunkers, allowing others to recover casualties. He killed two of three NVA attempting to capture him, knocked out three bunkers, and was found wounded three times still manning a .50-cal machine gun when his platoon reoccupied its position. For this action he received the Navy Cross. The NVA was forced to withdraw at 0530 hours while requesting reinforcements, which never appeared. Even though the combat was fierce and close, K/3-26 suffered only four KIA and 11 WIA, while 47 NVA dead were found and three wounded prisoners taken. It was found from the prisoners that they belonged to 4 Battalion, 95C Regiment rather than 6 Battalion as was reported by the detecting lieutenant. The other concerted attacks forecast for 950 and the base itself did not materialize, probably because of the failure to take 861.

To the east that same night attacks commenced to ensure QL9 remained cut. The 29C Regiment, 325C Division assaulted Hill 832, a remote outpost, and 48 and 66 Regiments, 320 Division, and 270 Independent Regiment's 47 Battalion cut QL9 and probed the district headquarters at Cam Lo. On the 23rd, 24 Regiment, 304 Division overran an ARVN outpost at Huoi Sun. Preparation time for these missions had been too short for the units tasked them, but nonetheless they were carried out.

As the NVA withdrew from Hill 861 at 0530 hours a barrage of artillery, mortars, and rockets struck KSCB without warning. Almost immediately Ammunition Supply Point No. 1 (ASP 1) near the east end detonated in a thunderous explosion of 1,100 tons of artillery, mortar, and recoilless rifle ammunition. Fragments, debris, and undetonated projectiles showered over the base. Eight Marines were killed in the blast and ammunition continued to "cook off" for two days. John Corbett in *West Dickens Avenue* recalls, "The horrendous noise hurts our eardrums so badly that in desperation we tear filters off cigarettes and plug them in our ears." Burning tear gas rolled over the base from ASP 1. Many Marines did not have gas masks and used wet towels. Marines carried smoldering projectiles by hand from around artillery positions. The generator for the fire-direction computer was knocked out, but firing data was calculated manually and counterbattery fired. Ammunition pallets continued to detonate through the day including a large stock of plastic explosives – this detonation was so large that it collapsed the roof of the 26th Marines COC 200m away. Newcomers were told a "300mm gun" caused the huge crater. NVA artillery tore up the airfield and its night-lighting system with 1,800ft



The twin 40mm M42A1 Duster self-propelled anti-aircraft vehicle also mounted a 7.62mm M60 machine gun for close-in defense. The twin Bofors guns pumped out 240 rounds per minute of high-explosive tracer and armor-piercing tracer, the latter able to defeat a PT-76 tank. The Army provided two of these deadly weapons for Khe Sanh.

of runway remaining usable. One parked helicopter was destroyed and five damaged along with one destroyed on 881S.

Hampered by weather, C-123 transports began delivering replacement ammunition that night: 26 tons of it. By the 23rd the runway was cleared of debris, permitting its use by C-130s. Much of the engineer equipment, power generators, post exchange, and telephone lines were destroyed or damaged, but ammunition debris was cleared, damage repaired, and the wounded treated. The day's barrage cost 14 KIA and 43 WIA. On the base's west end L/3-26 engaged a probing NVA platoon at 1950 hours, driving them off dragging their dead, but they left 14 bodies behind. While three main ASPs were maintained, smaller ammunition dumps were scattered throughout the base.

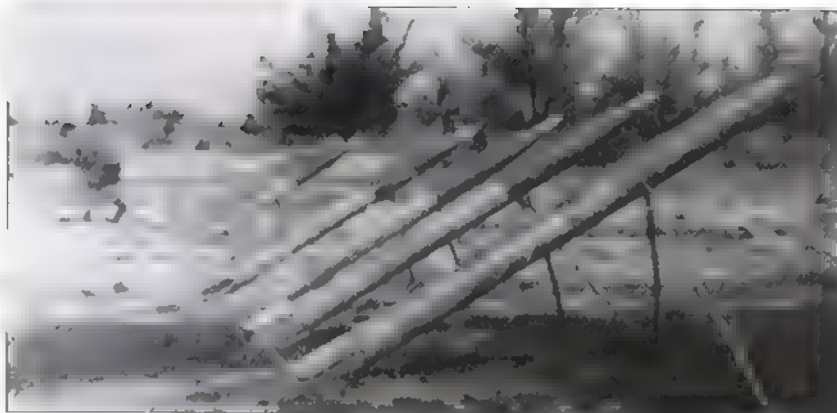
FALL OF KHE SANH VILLAGE

Khe Sanh village and the Huong Hoa District Headquarters 3.5km south of KSCB were defended only by 915th Regional Force Company with two platoons as well as two platoons of Company O, 3d Combined Action Group, together totaling 175 men including five US Army and 20-plus Marine advisors. The NVA attacked the village defenses right after the KSCB barrage began on the 21st. Capt Bruce B.G. Clarke, the army district advisor, initially beat off attacks with artillery brought in almost on top of the defenders. Capt Clarke recalled, "We survived because I continually called VT fuse [airburst] on us and the wire." Calls for air strikes also went out. The 7 Battalion, 66 Regiment, 304 Division attacked from multiple directions using fog for concealment. The village was overrun and the defenders holed up in the district headquarter compound with a CAP platoon 200 yards to the west. At noon the fog lifted and NVA ground attacks dwindled, as continual air strikes were directed against them. The enemy, however, kept up a barrage of mortars and RPGs. Army helicopters managed to deliver some ammunition, kicking it out of the doors over the besieged positions.

Two relief efforts were attempted during the day. D/1/26 from KSCB reached Hill 471 a kilometer north of the village. It was ordered

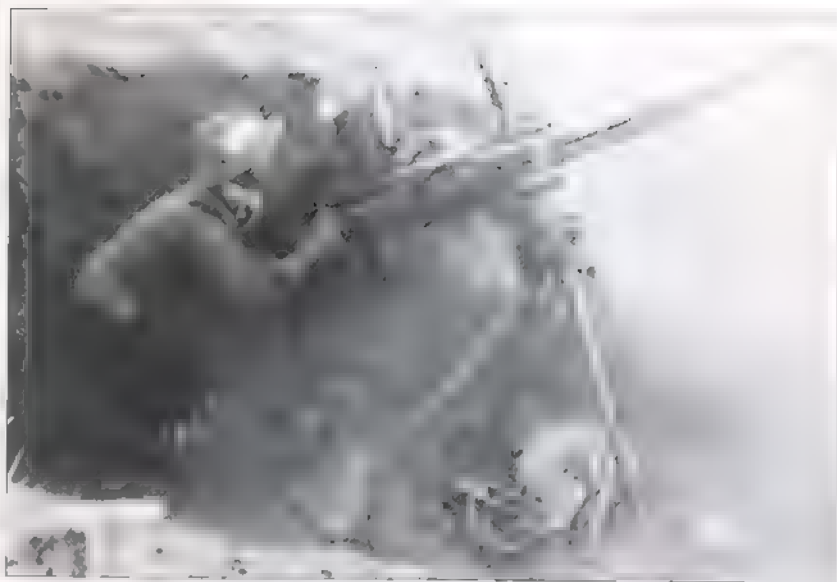
Besides firing from the simple tripod-mounted DKB single-tube launcher, the 122mm rocket could be barrage-fired from an even simpler mounting, a bamboo bipod. While not as accurate as a tube-launched rocket, all that was required was to man-pack the rockets into a firing area with some electrical wire (usually recovered US field telephone line) and some batteries (often discarded US radio batteries with enough juice left to ignite the rockets). This allowed them to be set up quickly in unexpected locations and fired, with the operators departing the area carrying nothing with them (the bearers having already left).

One of the most commonly used NVA artillery pieces at Khe Sanh was the highly accurate 122mm D74 gun, which had almost twice the range of the US 155mm: 24,000m as opposed to 12,950m.



to withdraw because of overwhelming NVA strength. In the early evening, the Army's 282d Assault Helicopter Company attempted to deliver 50 men of 256th Regional Force Company from Quang Tri City aboard nine helicopters. Mix-ups and confused orders found the unit assaulting into the Old French Fort a kilometer northeast of the village, which was firmly in NVA hands. One helicopter was downed and two crash-landed at KSCB and one at Quang Tri, with the loss of four US KIA and two MIA and about 40 Regional Force troops dead and missing. Early the next morning the separated CAP platoon moved out to fight its way to the district compound, but the NVA had withdrawn and were caught in a B-52 strike.

On the morning of the 22nd, a CAP platoon moved toward the Old French Fort hoping to recover survivors of the failed relief assault. Fearing they were walking into an ambush they withdrew, picking up some 150 weapons from among hundreds of NVA dead. Late in the morning the Marines were ordered to evacuate the village. The Marines on KSCB felt they could not provide consistent artillery support while delivering counterbatter, supporting the hill outposts, and conducting their own patrols. Informed by the Marines at KSCB that they were no longer able to support him, the district advisor relayed this message to



The predominant NVA antiaircraft weapon around Khe Sanh was the 12.7mm DShKM38/46 machine gun. The Type 54 was the Chinese version. US troops commonly referred to it as the ".51-cal." Actually both the US .50-cal and Soviet 12.7mm were .51-cal, but the ammunition was not interchangeable as rumored. A 12.7mm antiaircraft platoon protected each mortar platoon around Khe Sanh.

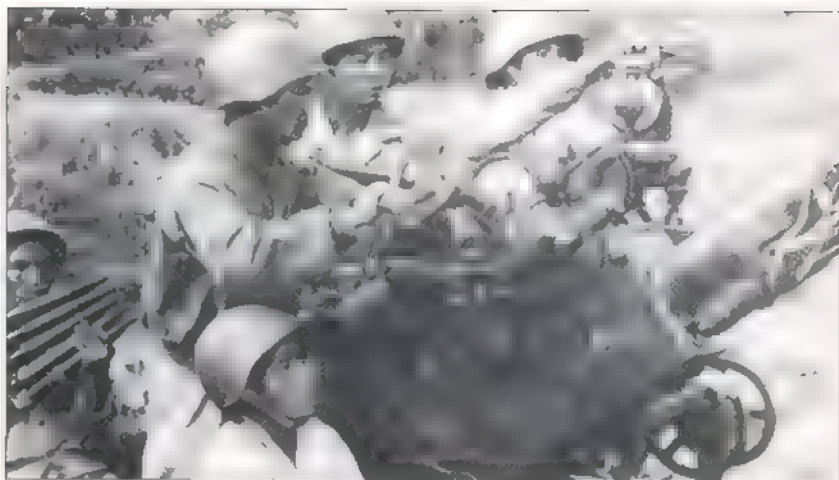
Province Headquarters, which ordered the evacuation of the village. Six helicopter lifts took out all Marines, two Army advisors, and the wounded indigenous troops. Regardless, two of the Army advisors, district government officials (Capt Tinh A Nhi, District Chief), Regional Force, and CAP troops exfiltrated by foot to FOB-3, where they were welcomed. The Marine advisors and Popular Force troops of CAP Company O took up residence there. From that point relations between I SSF and the Marines, with the exception of the Marine CAP advisors, began to sour because of Marine distrust of indigenous troops, and because the Marines did not have direct control over the FOB. The remnants of 915th Regional Force Company were lifted to Quang Tri City with their advisors. That afternoon an FOB-3 strike force swept down on the District Headquarters, destroyed everything of value to the enemy, and returned without losses as the NVA was entering the village.

THE BATTLE BEGINS

Dawn of January 22 found KSCB teeming with activity. Another 130 tons of ammunition was delivered by C-123s. They and Marine helicopters were evacuating wounded and refugees, large numbers of whom were flown out January 23-28. Others simply walked out to the east, a perilous trip with many not making it. Damage repairs were under way and marines were digging in. Artillery and air strikes were blasting known and suspected enemy positions. NVA artillery, mortars, and rockets were still hitting the base and outposts intermittently, causing delays to runway repairs and resupply. A helicopter was downed inside the base as it lifted off. At noon 3d MarDiv ordered 1/9 Marines at Camp Evans north of Hue to reinforce Khe Sanh with part of the battalion helicoptered into FOB-3 that afternoon. Greeted by mortar and small arms fire, the battalion took cover wherever it could.

In the morning 1/9 Marines assembled and marched to the Rock Quarry just to the west of the main perimeter. A trail leading to Hill 861

The largest NVA antiaircraft weapon used at Khe Sanh was the Soviet 37mm M1939 based on the 40mm Bofors. The Chinese version was the Type 55. It had a practical rate of fire of 80 rounds per minute. It appears not to have been employed in large numbers.



originated there, and 1/9 would defend the western approach and protect the DZ. The remaining two companies arrived that same day. With only limited building materials, the 1,200-man battalion dug in the best it could and established two outposts.

Activity continued at KSCB, with sporadic enemy shellings destroying the post office and damaging more bunkers and the runway. A fighter and a helicopter were shot down on the 23rd. Marine counterbattery against NVA artillery was proving difficult and only succeeded in expending large amounts of ammunition. NVA artillery, mortar, and rocket positions were extremely well dug in, camouflaged, and spread over such a wide area that targeting was very imprecise.

On the morning of January 24, the 33d Royal Laotian Battalion (BV33) astride QL9 at Ban Houaysan just inside Laos was attacked and overrun by NVA infantry and PT-76 tanks. (BV33 was funded by the CIA under Project "Elephant" and cooperated to some degree with US forces). The battalion fled and arrived at Lang Vei Special Forces Camp with 500 troops and 2,200 dependents and refugees. The USSF positioned them in Old Lang Vei and arranged for food and supplies. Seven tanks were detected by aircraft and one destroyed. This was the first warning that NVA tanks were present. On the same day a Marine patrol one kilometer north of Hill 558 was engaged in a bitter fight, but was able to extract itself.

At the request of Westmoreland for participation by an ARVN unit, LtGen Hoang Xuam Lam, 1 CTZ commander, contributed the 37th Ranger Battalion. Arriving on January 27, the battalion occupied partly prepared positions on the east end of the perimeter to provide more depth to the defense. The Rangers had to deepen the 2ft wide, 3ft deep trenches and build bunkers and covered trench sections. Through the last week of the month evidence was still being found of NVA preparations for attacks in the way of cut wire and reversed Claymores. The Marines listened for the sounds of tunneling, but this activity never occurred. Air-delivered, unattended ground sensors dropped in surrounding areas monitored enemy movements, and resulted in some success for targeting artillery and air strikes. The scope of NVA activity around the base was becoming apparent. The 3d MarDiv ordered Col Lownds to limit patrolling to within 500m, although 1-9 Marines continued to patrol out 1,200m and FOB-3







FIGHT FOR HILL 881A (pages 62–63)

On February 5, 1968, E/2/26th Marines occupied Hill 881A north of KSCB. The hill was 400m northeast of 881, separated by a saddle. Warned by sensors that a large body of NVA was approaching, they battered it with artillery, but at 0300 hours on February 6 at least 200 NVA attacked the partly prepared position with intense mortar support. Despite the Marines employing every weapon at their disposal, most of the position was overrun. The NVA appeared to be "hopped up" on drugs, and even tear gas failed to deter them. Massive artillery and air support was poured into the valley and the hillside to prevent NVA reinforcement. The NVA, though, appeared to think they were victorious and began looting positions of souvenirs. The lull allowed the Marines to consolidate and they launched a vicious counterattack behind a barrage of grenades, leading to hand-to-hand combat. Within half an hour after the NVA forced their way inside the wire they were driven down the hill. As they withdrew, 106mm recoilless rifles from 558 blasted their ranks. At 0810 hours the NVA attempted a weak counterattack. The company commander, Capt Earle Q. Breeding, a mustang officer who had fought in Korea as an enlisted man, coordinated fires from 881, 558, 881S, KSCB, and the Rockpile as well as firing 1,100 rounds from his own 81mm mortars. In the morning over 100 NVA dead were discovered on the hillside and within the perimeter. Many more died further down the hillside and in the valley. The Marine company lost seven dead and 35 wounded; all of the dead were lost in the opening NVA barrage. In retaliation the NVA shelled

the outpost and base all day, but Marine replacements were helicoptered into 881A. While artillery and heavy weapons contributed greatly to the battle, it was still a close-quarters infantry fight relying on the infantryman's key weapons. Riflemen were armed with the 5.56mm M16 rifle (1), semi- and full-automatic with a 20-round magazine. The problems encountered with it had been somewhat reduced because proper cleaning methods had been taught. Each 14-man rifle squad had a 40mm M79 grenade launcher (2) firing high explosive fragmentation rounds. Grenadiers were also armed with a .45-cal M1911A1 pistol. A squad with two 7.62mm M60 light machine guns (3) was habitually attached to each rifle platoon from the company weapons platoon. This belt-fed weapon could hammer out 600 rounds per minute. Hand grenades (4), "frags," were essential for defense and were expended in large numbers. M26 frags had a 5m casualty radius. The NVA was mostly armed with the 7.62mm AK-47 assault rifle (5), an extremely rugged and reliable semi- and full-automatic weapon with a 30-round magazine. Contrary to persistent rumors, US 7.62mm ammunition could not be fired from it or any other communist bloc 7.62mm weapon. The 7.62mm RPD light machine gun (6) was an ideal assault weapon owing to its light weight and compactness. Its drum magazine held a 50-round belt and could spit out 650–750 rounds per minute. Bangalore torpedoes (7) were used for blasting gaps through barriers. The NVA fabricated their own by fitting TNT blocks end to end and securing them with bamboo strips and cord. (Peter Dennis)

Troops of 3/26 Marines assemble beside the Khe Sanh runway as they arrive to reinforce the base on December 13, 1967. Little did they know that they would spend the next four months on the base or atop hill outposts.



continued its classified operations locally and inside Laos. The seven-day Tet ceasefire was canceled owing to repeated NVA violations.

On the night of January 30–31, 1968, the Tet Offensive tipped loose through South Vietnam. On the 30th the first B-52 strike in support of Khe Sanh delivered 1,125 tons of bombs. President Johnson's concerns for the base's survival went to the point of discussing the feasibility of using nuclear weapons. While planning never went beyond discussion, it did highlight the president's fears.

On February 5, F 2-26 occupied 861A 400m northeast of 861, as it prevented direct line of sight, and therefore mutual support, between 881 and 558. F 2-26 was then attached to 3-26. That night remote sensors indicated large troop movements west of 881S and Marine and Army artillery saturated the area. At 0300 hours on the 6th, 200 NVA, possibly survivors of the force plastered earlier, attacked 861A supported by mortars. Partly overrun in their incomplete positions, the Marine company counterattacked, resulting in hand-to-hand fighting. The NVA made a weak response and were sent reeling from the hill leaving over 100 dead. The Marines lost seven KIA and 35 WIA.

Scores of NVA 60mm and 82mm mortars rained the base within 2–3,000m. While the 122mm rocket was accurate in regards to deflection (launcher-to-target line), its range was somewhat erratic. To accommodate this it was preferred to position the launched fire down the long axis of the target. Launch positions east of KSCB would be within range of US 175mm guns at Camp Carroll, and also meant a longer supply line from Laos skirting KSCB. Hills 881S and 861 to the west would have been ideal, but were occupied by Marines. The only alternative was 881N 8km distant, 2km within the rocket's maximum range. NVA 130mm and 152mm guns were dug in and well camouflaged on Co Roc Mountain just inside Laos and 13km southwest of KSCB. Another position was Hill 305²² 10km west-northwest of 881S.

Rockets launched from 881N passed over 861, while artillery came over 881S. Even though vegetation, fog, and perpetual dust from air strikes often prevented flash-detection, the rounds were heard and a radio warning flashed to KSCB, "Artv. Artv, Co Roc." The operator

★ EVENTS IN CAMP

- 1 1700HRS 6 FEBRUARY NVA 152mm artillery strikes the camp from Co Roc Mountain to the southwest.
- 11 0115HRS 7 FEBRUARY The eastern end of the camp is under NVA control.
- 12 0130HRS 7 FEBRUARY Tanks have penetrated the western position of the camp and the MIKE Force outpost is under attack.
- 13 0230HRS 7 FEBRUARY NVA sappers and infantrymen are scattered throughout the camp, but pockets of defenders continue to hold out.
- 14 0245HRS 7 FEBRUARY Tanks are attacking the central perimeter and command bunker.
- 15 0330HRS 7 FEBRUARY The NVA commences concerted attacks on the command bunker. The camp is largely overrun by this time. Small pockets of defenders continue to hold out while other groups break out.

16 0335HRS 7 FEBRUARY The Marines deny the defenders holding out in the command bunker their request to send a relief force.

17 0430HRS 7 FEBRUARY Concerted attacks continue of the command bunkers. Some of the Vietnamese attempt to surrender and are killed when they emerge.

18 0600HRS 7 FEBRUARY The Americans in the command bunker continue to hold out and the NVA is salvaging weapons and munitions from the overrun camp.

EVENTS

- 2 800HRS 6 FEBRUARY NVA tank companies ordered to move from their assembly areas to attack positions.
- 3 2315HRS 6 FEBRUARY NVA 152mm artillery and 82mm mortars open fire and tanks are in their attack positions.
- 4 2325HRS 6 FEBRUARY 9 Company, 198 Tank Battalion with five tanks and 3 Battalion, 101C Regiment attack Lang Vei from the south.
- 5 2325HRS 6 FEBRUARY 3 Company, 198 Tank Battalion with four tanks and 5 Battalion, 24 Regiment attack Lang Vei from the west.
- 6 2325HRS 6 FEBRUARY 9 Company 198 Tank Battalion with two tanks and 4 Battalion, 24 Regiment attack Lang Vei from the east.
- 7 EARLY MORNING 6 FEBRUARY 8 Battalion, 88 Regiment attacks Old Lang Vei from northwest. This is a holding attack and is not intended to overrun the Laotian battalion.
- 8 0010HRS 7 FEBRUARY NVA tanks are discovered in the wire on the south side of the camp.
- 9 0050HRS 7 FEBRUARY Artillery fire from KSCB finally begins to fire in support of the camp after disbelieving it was under tank attack.
- 10 0100HRS 7 FEBRUARY Air Force forward air controller arrives over area and commences directing air strikes.

19 0700HRS 7 FEBRUARY Dawn and NVA elements begin to withdraw into Laos to the west, though many remain in the area through the morning.

20 0800HRS 7 FEBRUARY The Americans in Old Lang Vei direct air strikes in the vicinity of the overrun camp.

21 1030HRS 7 FEBRUARY American-led counterattack by Laotian company is launched against Lang Vei from Old Lang Vei, the first of three attempts, all of which are repulsed, with the last attempt made at 1110hrs.

22 1600HRS 7 FEBRUARY The survivors in the command bunker breakout and fight their way out of the camp to the southeast. Remaining NVA begin withdrawing to Laos during the late afternoon.

23 1700HRS 7 FEBRUARY FOB-3 recovery force air assaults into Old Lang Vei to assist survivors.

24 1730HRS 7 FEBRUARY The last survivors are extracted and flown to FOB-3. Indigenous survivors and part of recovery force exfiltrate overland to FOB-3.

THE FALL OF LANG VEI SPECIAL FORCES CAMP, 7 FEBRUARY 1968

The NVA attack on Lang Vei was a complex and well coordinated operation, with three combined arms assaults conducted on New Lang Vei from different directions, supporting attacks on Old Lang Vei, artillery support, and ambushes established on QL9 to halt any relief force from KSCB

NVA positions are shown at intervals of 100m or 200m.



FRIENDLY FORCES

- 1 Lang Vei Camp Strike Force with Detachment A-101 in New Lang Vei Camp
- 2 MIKE Force Platoon in outpost (platoons are rotated daily)
- 3 33d Royal Laotian Battalion in Old Lang Vei Camp (8,000 refugees were withdrawn)

NVA FORCES

- A 9 Company 198 Tank Battalion with 3 Battalion, 101C Regiment, 325C Division and two sapper companies
- B 3 Company, 198 Tank Battalion with 5 Battalion, 24 Regiment, 304 Division
- C 9 Company 198 Tank Battalion with 4 Battalion, 24 Regiment, 304 Division
- D 8 Battalion 66 Regiment 304 Division



A burning fuel dump set aflame by 122mm rockets. A significant quantity of fuel was stowed on the base for trucks, armored vehicles, weapons carriers, power generators, helicopter emergency refueling, and to burn out latrines – an essential sanitation measure. The bunker in the foreground is built with a stand-off roof above the actual roof with three layers of sandbags stacked atop wooden cargo pallets and set on cable spools for increased protection from artillery, rockets, and heavy mortars.

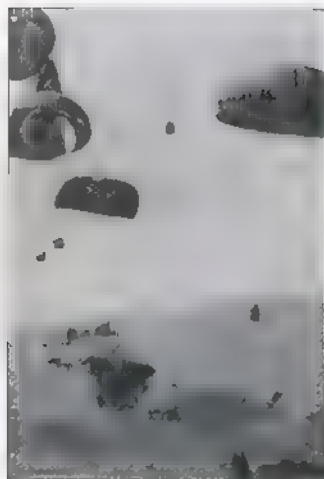
monitoring the warning net activated a truck horn mounted in a tree and men had 5–18 seconds to dive for cover. The operator would understatedly report back to 881S, “Roger India, Splash,” indicating the rounds had indeed landed on schedule.

The close-in B-52 bombardments were “number one on the hit parade” for the Marines. They climbed out of their bunkers to watch the rolling wave of detonations, which were sometimes within a kilometer of the base. Some officers feared the shock waves would collapse bunkers. One Marine described pouring sugar and powdered creamer into a canteen cup of coffee and letting the blast vibrations mix it. An NVA soldier held another view: “B-52 explosions are so strong that our lungs hurt.”

FALL OF LANG VEI

Old Lang Vei Special Forces Camp was located on QL9 9km southwest of KSCB and was moved to a new site half a mile to the west in September 1967. While still incompletely constructed, the camp was well bunkered, with established perimeter fighting bunkers. It was manned by 24 USSF, 14 Vietnamese Special Forces, and 443 CIDG including an attached Mobile Strike (MIKE) Force company. Detachment A-101 was under the command of Capt Frank C. Willoughby, but the senior officer present was LtCol Daniel F. Schungel. The camp was well armed with one 4.2in, seven 81mm and 16 60mm mortars; two 106mm and four 57mm recoilless rifles; two .50-cal and 39 30-cal machine guns, plus 100 LAWs. However, there was little antitank ammunition for the recoilless rifles and no antitank mines.

With BV33 routed and now at Old Lang Vei, four USSF were placed there to aid them. Field grade USSF officers were rotated through the camp as the BV33 commander, LtCol Soulang, would not take orders from a junior USSF officer. On January 30 a USSF NCO accompanying a Laotian patrol was captured by the NVA near Khe Sanh village. On the 31st a CIDG patrol engaged an NVA battalion outside Khe Sanh village, killing 54.



G-12 84ft diameter cargo parachutes descend on the Khe Sanh DZ, each carrying up to a ton of supplies or ammunition. The airdrops were extremely accurate and few missed the 200 x 300m DZ. Recovery crews are already moving out.

NVA units assigned to take Lang Vei received their orders late and were forced to organize on the approach march. The tanks were swam some 10km down the Xe Pon River, on the Vietnam/Laos border, to a point southwest of Lang Vei.

On the evening of February 6, 50 rounds of 152mm from Co Roc struck the camp. At 0050 hours on the 7th the defenders discovered tanks in the wire. The main attack was from the south into the central position by 3 Battalion, 101C Regiment, 325C Division, plus two sapper companies, and 9 Company, 198 Tank Battalion. In addition, 5 Battalion, 24 Regiment, 304 Division and 3 Company, 198 Tank Battalion launched a secondary attack from the west along QL9, with 4 Battalion, 24 Regiment conducting a supporting attack from the northeast. A 152mm battalion of 675 Artillery Regiment and elements of the 7 Engineer Regiment provided further support. The 8 Battalion, 66 Regiment, 304 Division attacked BV33 at Old Lang Vei.

The first penetration was in the southeast compound by five tanks approaching from the south. A USSF NCO destroyed two outside the wire with a 106mm. Four more came down QL9 from the west and two on QL9 from the east. The USSF called KSCB for artillery, arguing with the Marines that they were indeed under tank attack. What the Green Berets did not know was that the artillery on KSCB was being hammered by artillery fire from Co Roc to keep it from firing. Air strikes were also called for. The USSF organized antitank teams, but most of the LAWs either misfired or were duds. One tank was destroyed, but others were crushing fighting positions and NVA sappers blasted bunkers with satchel charges and flamethrowers. Another tank's turret was blown off when its ammunition exploded after it was hit by an LAW beside the command bunker.

Some of the defenders were trapped in the command bunker while the NVA made repeated attempts to flush them out with flamethrowers, satchel charges, and tear gas. Finally, the indigenous personnel surrendered and were executed upon exiting. The Americans continued to hold out. USSF and CIDG were still holding out in other parts of the camp. The three USSF with BV33 convinced some Laotians to counterattack. They continued to direct air strikes and led five counterattacks until two of the USSF were killed. Some USSF and CIDG managed to exfiltrate from the overrun camp. The Marines would not send a relief force as they suspected an ambush awaited them. An FOB-3 reaction force under Maj George Quamo was helicoptered into Old Lang Vei at 1715 hours to aid in the recovery of survivors. With the USSF survivors flown out, some of the recovery force fought their way on foot back to FOB-3. CIDG and Laotian survivors making it to Khe Sanh were disarmed by the Marines and held in a secure area until identified as friendly by USSF. Some 3,000 Montagnard and Laotian civilians and military were flown out on February 8.

Fourteen USSF made it out with only one unwounded. Ten were missing, two of whom were captured. In total 244 CIDG were recovered (61 wounded) and nine Vietnamese Special Forces survived (three wounded). The CIDG was credited with resolutely defending the camp with at least half of those killed dying in their positions. NVA losses were estimated at 250 dead and seven tanks knocked out. All Americans were decorated. Sgt 1st Class Eugene Ashley, Jr. was posthumously awarded the Medal of Honor for his repeated counterattacks from the old camp.







THE FIGHT FOR THE COMMAND POST, LANG VEI

(pages 70-71)

The NVA tank attack on Lang Vei Special Forces Camp began at 0050 hours, February 7 with PT-76 tanks approaching from three directions: five tanks from the south, four more from QL9 from the west, and two on QL9 from the east. The two attacking tank companies each had eight tanks, but only 11 were committed with the rest in reserve. Though a 106mm recoilless rifle knocked out two tanks as they approached from the south, several were soon rampaging through the camp accompanied by infantrymen and sappers. The Green Berets hastily organized antitank teams, but to their dismay they found that most of the M72 light antitank weapons (LAW) either misfired or the round failed to detonate when it struck a tank. The single-shot, throwaway LAW had a 68mm high-explosive antitank (HEAT) warhead capable of penetrating 350mm of armor at up to 200m. This first model was easily affected by heat and humidity; later models were more reliable. Regardless, some functioned correctly and five more tanks were knocked out by the little weapons. Of the seven tanks knocked out, four were recovered by the NVA. LtCol Daniel F. Schungel, a USSF lieutenant, two USSF NCOs, and a Vietnamese Special Forces lieutenant positioned themselves behind a barricade (1) of rock-filled 55gal drums protecting the entrance to the camp's underground 25 x 40ft concrete command bunker (2). A sandbag-faced, concrete observation bunker (3) was situated at the opposite end of the command bunker. It would later be totally destroyed by satchel charges, their blasts so powerful that the sandbags were

blown from the walls and the roof collapsed. An LAW hit set a tank aflame beside the command bunker and the crew bailed out to be shot down by the men behind the barricade. It soon brewed up and its turret blew off. A second tank rumbled past it and was firing point blank into the drums with its machine gun and main gun before it too was hit by an LAW. LtCol Schungel credited Vietnamese Special Forces Lieut Quy's unrelenting suppressive fire with keeping the barricade defenders alive. The cover was destroyed though and the five men, all wounded but one, fanned out with more LAWs and grenades to continue attacking tanks. However, more NVA infantry arrived and they were forced to withdraw into the command bunker. The NVA tried to force the eight USSF, a different Vietnamese Special Forces officer, and a dozen or so CIDG out of the bunker with flamethrowers, satchel charges, and tear gas grenades. Many of the indigenous troops surrendered and were executed as they emerged, but the Americans and a few others held out until the NVA withdrew after daylight. The Soviet-made PT-76 light amphibious tank (4) mounted a 76.2mm D-56B main gun for which it carried 44 rounds of ammunition. A 7.62mm SGMT coaxial machine gun was mounted beside the main gun. A three-man crew was standard, but some in the attack carried four men. The PT-76 was a reconnaissance tank, not a main battle tank. It weighed only 14 ton, not much more than a US M113A1 armored personnel carrier, and had even thinner armor, only 11-14mm, which could be penetrated by a .50-cal machine gun. (Peter Dennis)

The Marines awarded USSF Detachment A-101 the Presidential Unit Citation (Navy).

The QL9 corridor was now unprotected, making 1/9's position at the Rock Quarry even more important. While the Marines' decision not to send a ground relief force to the camp was undoubtedly wise, the decision did nothing to improve USSF/Marine relations. As an aside, in January a Marine company had practiced a relief effort moving cross-country to Lang Vei rather than on QL9 to avoid ambushes. The operation had required 19 hours in the dense vegetation and rough terrain. A night helicopter relief would probably have been disastrous.

THE BATTLE CONTINUES - LIFE IN THE V-RING

Flush with victory after overrunning Lang Vei, the NVA made its next move closer to KSCB. 1st Platoon, A, 1/9, reinforced to 66 men, occupied well-protected Outpost Alpha 1 on Hill 64, 500m west of the Rock Quarry. At 0415 hours, February 8, a battalion of 101C Regiment assaulted up the gentler sloping northwest side of the hillock after a short but heavy mortar barrage. The quarry too was battered by mortar and machine-gun fire. Approaching in the fog and crossing the multiple wire barriers by throwing canvas over them, the NVA overran most of the outpost with the US platoon commander killed fighting back. Less than half the platoon held a trench section on the south side, and they endured endless grenade attacks. A Chinese grenade struck Pfc Michael A. Barry's helmet. He scooped it up, but before he could throw it back it detonated in his hand. His arm, back, and leg were peppered by tiny fragments but his hand was uninjured. A platoon from the quarry counterattacked, assaulting straight into the NVA. Artillery, air strikes, and fire from the quarry blasted the NVA rear to prevent reinforcements and caught them withdrawing from the hill. Over 150 NVA dead were left, while the Marines lost 24 KIA and 27 WIA. The outpost was abandoned as it was too exposed.

February 10 is the date the NVA claim to have switched over to siege tactics. The official NVA history states,

Throughout 50 long days and nights, the 304 and 325C Divisions, supported by artillery, antiaircraft artillery, sappers, and engineers from the Route 9 Front, built siege positions stretching right up to the perimeter of the enemy base. Our forces defeated enemy counterattacks and using sniper weapons and artillery attacks, forced American and puppet troops to endure a living hell.

The NVA now focused on the base itself. Trenching efforts began at this time, approaching from the east and south, reaching 2,000m from assembly areas and sometimes creeping 2-300m at night. Trenches approaching from the east took advantage of the Rao Qung gorge. Heavy bombing and mortars did not deter the digging. Marine patrols would venture out before the fog lifted and fill in or collapse trenches. NVA artillery continued to fire on the base before the fog lifted making



Artillery rounds impacting among the tents. The tents actually protected semi-sunken bunkers from rain. Note the "orchard" of radio antennas in the background, many of which were dummies ordered erected by Col Lownds to deceive NVA gunners.



Lang Vei Special Forces Camp after its fall on February 7, 1968. In the center is the hulk of a PT-76 tank with its turret blown off. Immediately below it is the observation post bunker blasted by demolition charges and its sandbag revetting blown away. To the left of the OP bunker is the collapsed roof of the underground command bunker. The battered 55gal drum barricade can be seen at the command bunker's left end. The south perimeter fighting bunkers of the central position can be seen above the carnage of the command bunker.

it almost impossible for observers to target them. Initially the Marines had tried to blast the NVA at long range, attacking supply lines and assembly areas. It was decided that if the NVA was allowed to sap forward with their trenches, making them more easily detectable and putting them within range of every weapon on the base, it would be easier to attrite them. Marine grenadiers would adjust their M79 grenade launchers on the unoccupied trenches during the day and then lob rounds into them as they were sapped forward at night.

The NVA adopted unusual measures to conceal their artillery. Rather than establish battery positions with four guns closely situated in a geometric position, individual guns were positioned along a common gun-to-target line at roughly 500m intervals. Each gun was adjusted for deflection, and, when a battery fired a mission, an individual gun had only to be adjusted for range. This prevented all the guns from being destroyed in a traditional battery position by a single artillery or air strike. Mortars were sometimes sheltered in deep underground bunkers

with a small angled tunnel as a firing port. These could then only be fired at a single target hilltop, but it greatly enhanced the survival of the mortar and made it impossible to detect.

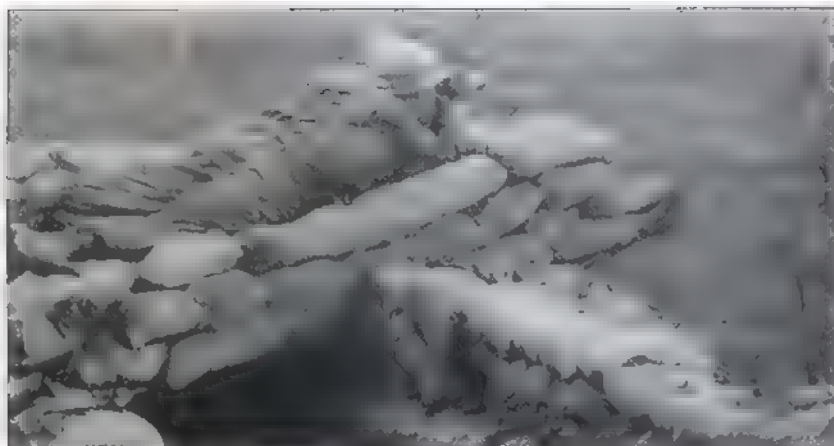
The first probe on the 37th Ranger Battalion sector by an NVA company occurred on February 21. Shelling of the base continued with slight increases. On the 23rd, 1,307 rounds, the highest during the siege, killed 12 and wounded 51. ASP 3 blew up, destroying 1,620 90mm gun and 106mm recoilless rifle rounds. On February 25, a B/1/26 platoon south of the base was ambushed in an NVA bunker complex and another platoon was dispatched to assist them, which was also ambushed. The ensuing firefight cost five KIA, 17 WIA, and 26 missing (one of whom was captured). Patrolling was now restricted to that "necessary to ensure the security of ... defensive obstacles and local security elements."

Marines are assault troops, aggressive and offensively oriented by doctrine, training, and nature. Khe Sanh was not the kind of situation they desired – dug-in for a prolonged period, enduring constant shelling, and unable to conduct local attacks or even aggressive patrolling.

The "V-ring" is Marine parlance for a rifle target's bull's-eye, and this was how Marines felt on KSCB and the hills. NVA artillery, rocket, and mortar fire fell on the base at an average rate of 150 rounds per day, occasionally reaching over a thousand. The most desirable targets for NVA gunners were the airfield (when aircraft were present), ammunition dumps, and Marine artillery. Natural dispersion of rounds, especially rockets, ensured that no place on the small base and tiny hilltops was safe. Only three Marine guns, however, were knocked out on KSCB and one on 881S, all of which were replaced. The hills did not receive as much fire, though on occasion they were given special attention. Few rockets were fired at the hills because the small size of the Marine positions made them extremely difficult to hit with moderately accurate rockets. Mortars were a greater threat on the hills.

Besides the heavy stuff, the Marines contended with NVA snipers, long-range machine-gun bursts, and sporadic spurts of mortars. All this kept the defenders constantly on edge. Steel helmets and flak vests were mandatory wear. Even "flak pants" were issued, providing diaper-like protection for the groin area. At least one Marine marked on the back of his flak jacket, "Caution: Being a Marine in Khe Sanh may be hazardous to your health" (a quotation from *Newsweek*). The Marines did not take the situation lying down. Life was monotonous on the base and in the hills, and not being the type to turn a cheek they thrived on countering the daily harassment by countersniping with their own snipers, 7.62mm and .50-cal machine guns, 106mm recoilless rifles, and countermortar fire. Observers constantly searched for telltale flashes and smoke to direct artillery, mortar, and air strikes, a difficult task with the fog and hanging dust and smoke.

On 881S Marines were plagued by a particularly good NVA sniper who in a week wounded ten men seriously enough that all had to be medevaced. The glint of his telescope was detected one day and he was dispatched with a 106mm recoilless rifle. His replacement was such a poor shot that that one Marine suggested, "Skipper, if we get him, they'll just replace him with someone who might be able to shoot." While easily detected, he was left alone; a rare instance in combat where his ineptitude kept him alive.



A pair of Marines lay atop their perimeter bunker searching for the faint telltale puff of smoke of a mortar firing. This was extremely difficult among the vegetation, dust, and fog. The three-sandbag-thick roof is laid atop recovered M18 airfield matting. Draped over the sandbags are firing wires leading to M18A1 Claymore antipersonnel mines in the barrier wire.

The daily grind was rough, though: routine monotony shattered with moments of explosions and fear. The perpetual fog and dreariness of the place was depressing enough, though marines commonly described the incongruous beauty of the green hills and the contrasting red soil. The activity was incessant, however: there were constant work details digging trenches, filling sandbags, building and repairing bunkers, repairing wire obstacles, replacing Claymores and trip flares, burning grass in the obstacle belts, collecting and sorting artillery cartridges and ammunition packing materials, hauling trash to the dump, ammunition, water and ration details, scrounging building materials, unrelenting guard duty at all hours, local patrolling, and manning outposts and listening posts. These tasks, coupled with the stress of endless shelling and harassing fire and erratic sleep, was tough to endure for two and a half months. Every marine knew that artillery, heavy mortar rounds, and rockets scoring a direct hit on a bunker would collapse or blow it apart. Every vehicle on the base sported fragmentation holes. Everyone lost buddies when fire struck with little or no warning.

Living conditions were harsh on the base and worse in the hills. Besides all the other work, the marine had to maintain and improve his own position, clean weapons, prepare his own C-rations, and simply try to take care of himself. When the weather closed in, monotonous C-rations were sometimes limited to one or two a day. Often the canned rations could not even be heated. Water was frequently in short supply and rationing was common. Water had to be flown out to the hills; when the weather prevented resupply sometimes each man received only half a canteen cup a day for drinking and shaving, a grooming standard the Marines maintained, though on the water-poor hill positions beards were common. Fog and enemy fire sometimes caused them to go for days living only on a small amount of collected rainwater or dew, and the liquid in C-ration fruit cans. There were no bathing facilities and filthy clothing often remained unchanged, occasionally washed in drums of rainwater. Uniforms, besides being coated with red dirt and dried sweat, were stained with spilt food, coffee, and weapon oil. The soil turned everything red, permeating equipment, uniforms, hair, and skin.

The hilltop Marines lived in grubby, foul-smelling bunkers, which leaked when it rained, and flooded or even collapsed if the earth sides and sandbags became too sodden. They were overrun with rats, roaches, and

large green flies (because of so many unburied NVA dead) Latrines had half-55gal drums, which were pulled out daily; the waste was mixed with diesel fuel, and burned generating columns of gray smoke.

While not outright cold, it was damp and chilly with drizzle sometimes lasting for days. To exhausted, dehydrated troops who did not receive field jackets until later in the siege, it was cold much of the time. Rain jackets were worn for some degree of warmth. Field jackets were received later, but there were not enough to go around. Afternoons might be hot and humid. On warm days Marines would wear only flak jackets.

There was no organized entertainment, though Marines often made their own. Tossing footballs or frisbees from hole to hole during shellings (whoever fumbled it had to run out to recover it), tackle football, no touch football, rat-killing contests, and simply reading dog-eared paperbacks were common diversions (with an ear cocked for incoming). After ammunition and rations, mail had priority. "Care" packages from home with food and goodies were shared with buddies. When the Marines' 13-month tour of duty was completed they could be flown out and serious casualties were medevaced out as replacements were flown in. Marines with over six or seven months in-country were even dispatched for out-of-country R&R and returned in a week and a half.

NVA soldiers endured much worse. A soldier of 9 Regiment, 304 Division, wrote in his diary:

Here, the war is fiercer than in all other places. It is even fiercer than at Cao Bang and Dien Bien Phu. All of us live underground except the units engaged in combat. We are in the sixtieth day and B-52s continue to pour bombs onto our area. If visitors come here they will say that this is an area where it rains bombs. All vegetation and animals, even those who live in deep caves or underground, have been destroyed. One sees nothing but the red earth.

AIR SUPPORT

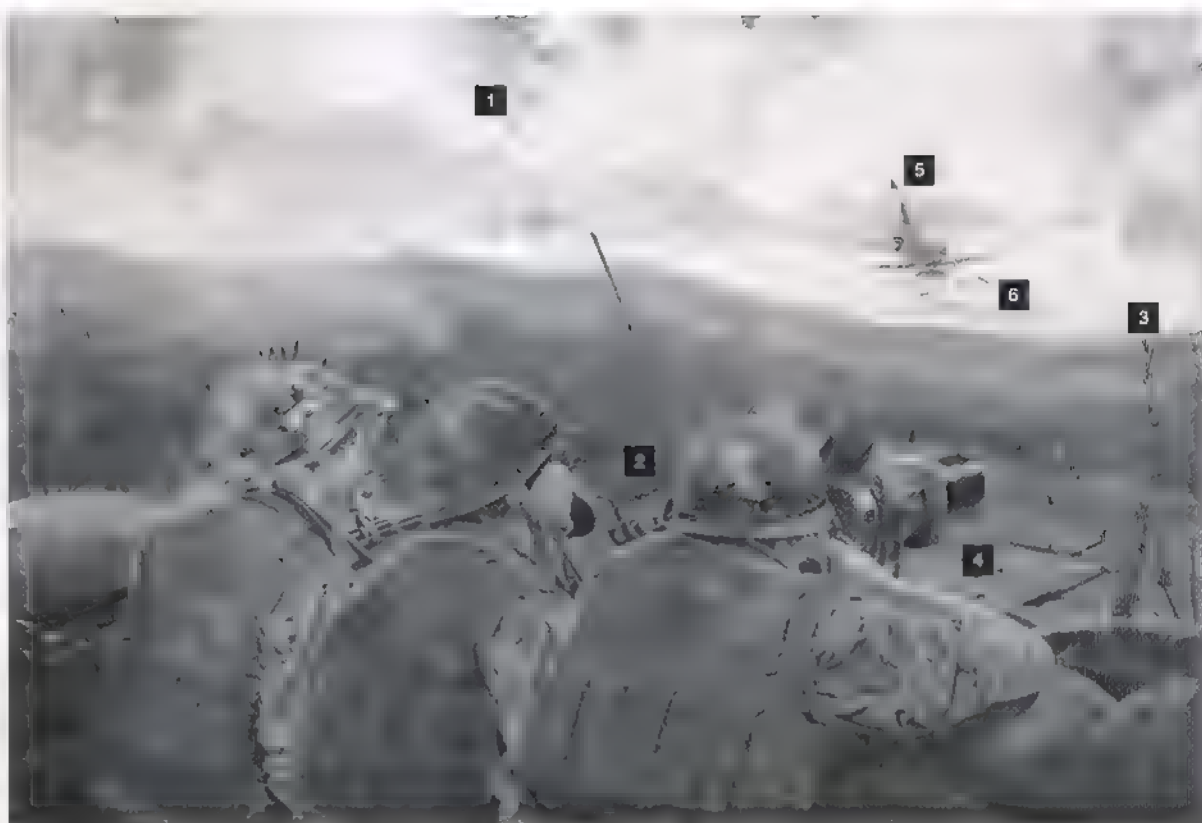
Operation *Niagara*, the support of Khe Sanh by air, was absolutely critical, and massive. Resupply, medical evacuation, tactical close air support, strategic bombardment, surveillance, and reconnaissance were all required.

The base was completely reliant on aerial resupply delivered either on a single runway or DZ. On an average day the defenders consumed 126 tons of supplies. Air lift – fixed-wing and helicopter – was more than sufficient to deliver that tonnage and more. After the loss of 1,100 tons of ammunition to NVA shelling, KSCB required a daily average delivery of 235 tons for a while, the peak delivery day being January 27 at 310 tons. Weather sometimes prevented the target tonnage to be met, however, and occasional shortages arose.

On February 10 a landing Marine KC-130F was struck by machine-gun fire. While able to land and taxi off the runway, the transport was aflame and destroyed with the loss of eight of the 11 aboard. Prior to this only seven C-130s had been damaged by ground fire. Another C-130 was damaged on the 12th. The Air Force closed the base to the \$2.5 million







"THE MIGHTIEST CORPORAL IN THE WORLD"

(pages 78-79)

The five Marine hill positions north of KSCB relied on massive air strikes and artillery support from KSCB, and mortar fire from other hill positions. Three 105mm howitzers on 8815 were invaluable for supporting the other hill positions and even the main base. Close air support provided by Marine, Air Force, and Navy fighter-bombers was able to deliver a huge amount of ordnance in a small area. An A-4 Skyhawk carried eight 500lb bombs; an F-4 Phantom II could carry up to 24 – twice the load of a World War II B-17G Superfortress; and an A-6A Intruder could deliver 30 500lb bombs. However, F-4s typically carried only 12 500lb bombs to improve performance. Essential to the effectiveness of close air support were the Tactical Air Controllers (Airborne) (TAC(A)), circling all day long in little Cessna O-1E Birdogg spotters (1), searching for targets, marking them with white phosphorus rockets, and directing fighter-bombers as they served as the communications link with ground observers. Virtually 24 hours a day fighter-bombers circled in holding patterns as ground and airborne observers searched for targets. When the strike aircraft arrived on-station they reported into the TAC(A) and he would direct them to targets. Standard infantry radios could not talk to fighter-bombers. Infantrymen requested air strikes through the TAC(A), with whom they could communicate using infantry radios such as the AN/PRC-25, the standard back-packed radio. They also used specialized radios such as the VHF/UHF AN/PRC-41 as here (2). Almost legendary is Corporal Robert J. Arrotta

of 1/3/26, who controlled over 200 air strikes from Hill 8818, dubbed the "Mightiest Corporal in the World" by his CO. With Lance Corporal Molimao Niutaoa, an American-Samoan known as "Pineapple Chunk" because of his size, he spotted NVA artillery muzzle flashes on Hill 350 (3) using Navy 20-power binoculars (4). The artillery position was 12-13,000m distant and there were no landmarks for reference in the mountainous jungle-covered terrain. He intently kept his eyes locked on the point he had detected the flashes in. No one else was able to spot the weapons' location. Using standard artillery adjusting techniques, "Pineapple Chunk" relayed corrections to the TAC(A) through Arrotta, "Left 2,000, add 1,000" as the Birdogg fired 2.75in white phosphorus rockets onto the mountain side. An A-4 Skyhawk (5) would roll in and release its load of eight 500lb Snake-eye bombs (6). A Snake-eye is a standard Mk 82 general-purpose bomb fitted with large Mk 15 folding fins that opened when released to retard the bomb's fall. This allowed low-flying fighter-bombers to exit the target area before the bomb string impacted and prevented damage from its own bombs' fragmentation. The fourth flight nailed the target and the marines were awarded with secondary explosions rippling across the hill's face. The "iron bombs" in use included the 250lb Mk 81, 500lb Mk 82, 750lb M117, 1,000lb Mk 83, and 2,000lb Mk 84. A 500lb Mk 82 was filled with 192lb of Tritonal. Also widely employed was the BLU-27/B 750lb fire bomb filled with 100 gallons of gasoline enhanced and thickened with benzene and polystyrene – Napalm-B for an actual bomb weight of 873lb. (Howard Gerrard)

transports and the Marines followed suit ten days later. C-123s and C-7s could still land. The C-130 ban was lifted for four days at the end of February, but re-imposed when a C-123 was destroyed taking off.

The Air Force first employed the experimental Low Altitude Parachute Extraction System (LAPES) on February 16. This involved a C-130 flying down the runway 5ft off the matting, deploying a special parachute out of the lowered tailgate. Linked-together speed pallets loaded with 9 tons of cargo were pulled out by the parachute, sliding down the runway to a stop. The Ground Proximity Extraction System (GPES) was conducted similarly with an extraction hook attached to the pallet and was first used on March 30; the hook snagged an arresting cable stretched across the runway and the load was pulled out. Because of fog and short visibility only 52 LAPES and 15 GPES missions were conducted.

The primary means of air delivery was by 496 precision parachute drop sorties, where 14–16 1-ton wooden pallet loads could be dropped in a single sortie. Because the aircraft dropped from 400ft and the parachutes opened at less than 100ft above ground, the vast majority of the loads landed in the small DZ with an error of only 95–133 yards. Of the 12,430 tons of cargo delivered to Khe Sanh by the Air Force, two thirds was by parachute, LAPES, and GPES. Marine KC-130Fs delivered another 2,000 tons. Transports actually landing to deliver supplies were on the ground for less than three minutes. As they taxied down the runway, pallets were rolled off the tailgate and any passengers leapt off without the aircraft stopping. Those being flown out, including litter cases, were loaded onto the slowly rolling aircraft as they ran on to the runway from adjacent cover, the able-bodied outbound passengers carrying the wounded. Large numbers of refugees were also flown out by transports. Recovering the pallets dropped on the runway and parachuted onto the DZ was a dangerous job for 3d Shore Party Battalion, Air Force aerial port, and other detailed personnel. Forklifts and trucks were frequently damaged by mortar fire directed at the recovery details.

Resupplying the hill outposts was a major undertaking. Rather than flying in supplies from KSCB that first had to be delivered there by air (the practice prior to the siege), they were flown by Marine helicopters directly from Dong Ha to each outpost and delivered under a hail of automatic weapon, artillery, and mortar fire. This arrangement meant that the helicopters did not have to spend time under the gun at KSCB picking up repacked cargo. It was a slow process, however, as it required 5–10 days for supply requests to be fulfilled. Rather than the outposts providing suppressive fire, as much fire as possible from KSCB was provided so as not to expend outpost ammunition, which would have to be resupplied. The helicopters had to fly to Khe Sanh using instruments and then were directed by radar ground control. Sometimes the base was clear of fog, but clouds enshrouded the hills. Marine Aviation assets were under 1st Marine Aircraft Wing (MAW) commanded by MajGen Norman J. Anderson. Helicopters flown by Marine Aircraft Groups 16 and 36 included:

- Bell UH-1E Iroquois (Huey) light utility
- Sikorsky UH-34D Sea Horse medium utility
- Boeing Vertol CH-46A Sea Knight medium cargo
- Sikorsky CH-53A Sea Stallion heavy cargo

Helicopter losses and damage quickly mounted and on February 24 a new system was instituted. The Super Gaggles was a task force of 8–16 CH-



122mm rockets burst near the control tower and AN/TPQ-10 radar site. Parked UH-1E Huey helicopters can be seen to the left of the radar dishes. This view is looking east across the parking area.

46 helicopters escorted by up to a dozen Marine A-4 Skyhawk attack aircraft and four UH-1E gunships. Air and ground fires were coordinated. A TA-4F would first arrive for a weather check. A-4s would then attack known and suspected gun positions in the vicinity of the outpost with napalm and tear gas spray. Two A-4s laid smoke screens on either side of the approach seconds before the helicopters roared in and four A-4s hit suspected enemy positions. The helicopters dropped their 3,000lb sling loads and were out in seconds. Such efforts sometimes occurred four times a day. Only two helicopters were lost during the hundreds of Super Gaggles missions. Marine helicopters flew over 9,000 sorties delivering 3,300 tons of cargo and 10,600 passengers to KSCB and the hills.

The 3d Air Division's Boeing B-52D Stratofortress strikes, "Arc Lights," were delivered in unprecedented quantities to support Khe Sanh. A single B-52 typically dropped 27 tons of 250, 500, and 750lb bombs. A three-plane cell blanketed a 1 x 2km swathe with 252 500lb and 72 750lb bombs. Safety restrictions limited loads to be dropped within 3km of Marine positions, but as the system was perfected they were delivered within a kilometer beginning on February 26. Once under way, after January 30 eight "Arc Lights" per 24 hours were allocated to Khe Sanh. Later cells arrived every 1-3 hours and, at the peak, two cells every three hours. Target requests required only a 15-hour lead-time. A total of 2,602 B-52 sorties delivered 75,631 tons of ordnance, an average of 35 sorties and 1,022 tons a day, 85 percent more sorties and 82 percent more bombs than the daily average for all of South Vietnam in the prior 12 months. Entire NVA units were destroyed along with fortifications and gun positions; troops deserted. However, they were not fully effective. A Navy lieutenant attached to the Munnes, Bernard D. Cole, stated, "The strikes would quiet down the NVA gunners [on Co Roc] for a couple of hours - from the shock ... but then they would resume firing." Regardless, Westmoreland credited the B-52 as "the thing that broke their backs ..." and no doubt it was.

Tactical close air support delivered by the Air Force, Marines, and Navy was massive. The Seventh Air Force (exclusive of B-52s) delivered 9,691 sorties and 14,223 tons of ordnance, the 1st MAF did 7,078 sorties and 17,015 tons, and Navy Task Force 77 provided 5,337 sorties and dropped 7,941 tons. Douglas AC-47D Spooky gunships with three

Tactical Close Air Support Aircraft Employed at Khe Sanh

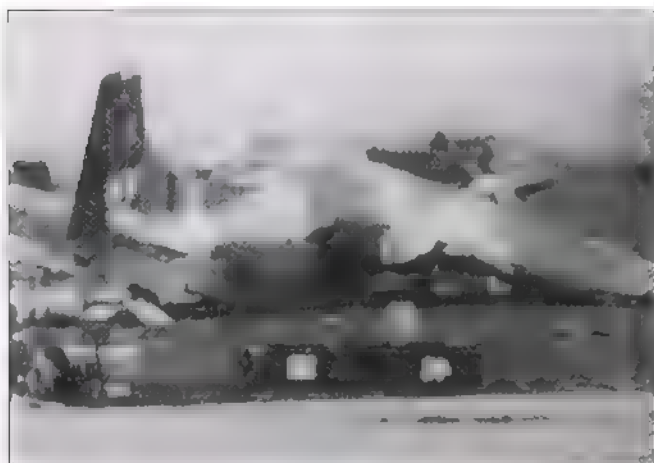
Aircraft	USAF	USMC	USN
Douglas A-1 Skyraider attack			x
McDonnell Douglas A-1H Skyhawk attack		x	x
Grumman A-6A Intruder attack		x	x
McDonnell Douglas F-4 Phantom II fighter	x	x	x
McDonnell Douglas F-4 Phantom II recon	x	x	x
Chase Douglas F-4E Phantom II fighter		x	x
North American F-100 Super Sabre fighter	x		
North American T-28D Nomad attack	x		

7.62mm miniguns firing up to 18,000 rounds per minute were not used over Khe Sanh until March 21 after the air defense threat had diminished.

Two techniques were devised to organize and coordinate combined artillery and air strikes quickly against area targets outside Khe Sanh. These techniques allowed a great amount of fire to be placed on an area much more rapidly than requesting a B-52 strike. When observers, sensors, patrols, or other intelligence detected enemy movements, the Khe Sanh Fire Support Coordination Center went into action. A-6 Intruder attack aircraft, flying from carriers and each carrying 28 500lb bombs, were orbiting on-station, awaiting strike requests. Their run would be controlled by radar on KSCB. Khe Sanh's own artillery and the 175mm guns at the Rockpile and Carroll would plot their firing data based on the target area supplied by the FSCC. Thirty seconds before the Intruders arrived the 175mm guns salvoed 60 rounds into half the target block, the Intruders ripped their 56 bombs into the block's center, and Marine 4.2in, 105mm, and 155mm guns would fire 200 rounds into the other half of the block. The timing of delivery was so precise that the rounds and bombs began to impact simultaneously. The "Mini-Arc Light" covered a 500 x 1,000m block and the "Micro-Arc Light" a 500 x 500m area with proportionally less ordnance. The latter could be plotted faster – ten minutes – and was used for fleeting or smaller targets. The "Mini-Arc Light" required 45 minutes to coordinate. On a typical night three or four "Mini-Arc Lights" and six to eight "Micros" were executed.

Through most of the Khe Sanh operation the 1st MAF and Seventh Air Force, which also controlled Navy air, operated somewhat separately from each other. An agreement was made on January 22 for more effective coordination, but they still functioned independently. The Marines controlled their air support and artillery assets through the FSCC on the base, which included the artillery Fire Direction Center and the Direct Air Support Center. Air Force and Navy aircraft operating over Khe Sanh were controlled by an EC-130E Airborne Battlefield Command and Control Center. The Air Force was dissatisfied with this as they felt 1st MAF assets should have been centrally controlled and available for use anywhere in Vietnam, not just for exclusive Marine use. The Marines, however, considered control of its own air assets essential to their air-ground team concept. The agreement did require the Marines to notify the Air Force of available sorties that they did not require. With rising numbers of Army aviation units deployed to I CTZ and increased tempo and complexity as Operation *Pegasus* got under way, on March 8 Westmoreland appointed Gen William W. Momyr, commanding Seventh Air Force, as the single manager to control all tactical aircraft operating in the Khe

The burned out hulk of a C-123K Provider. Numerous television reporters flew into Khe Sanh for a brief stay, sometimes minutes, and invariably used the wrecked aircraft bone yard as a backdrop for their dire perditions.



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Sanh area. Though the integration of all air and control assets did not take full effect until March 22, the coordination of airpower gradually improved.

BEGINNING OF THE END

At 2130 hours on the night of March 1, elements of 66 Regiment attempted to attack the 37th Ranger line, the only determined direct ground attack on the base. Sensors detected the movement and B-52 strikes were diverted along with artillery and air strikes. The first attack was beaten off to be followed by a second two hours later and a third three hours after the second. A total of 78 dead NVA were found in the assault trenches and wire. Many more were killed in the NVA immediate rear, perhaps a large portion of a regiment. Montagnards reported seeing stacks of 200–500 dead NVA. The NVA had assessed the Rangers held the weakest sector and conducted seven probes through March, including one of battalion size on the 18th. The approaching assault trenches were the most extensive in this sector. The Rangers were rock steady and suffered few casualties. Beginning on March 8, the Rangers began sweeps to the east, making two contacts and inflicting casualties on the NVA. Regardless of restrictions on the Rangers entering the Marine lines, B/1/26 (the Ranger's back-up) held them in admiration and a lot of trading went on between the units.

On March 6 a C-123 was shot down several miles out from KSCB, killing all 49 aboard. Another C-123 was damaged on the runway on the 5th and another was destroyed by mortar fire on the 17th. Three helicopters were also shot down that month. The troops were beginning to feel the strain after two months of shelling and constant stress. It was worse on the exposed hill outposts.

On March 15 various intelligence sources reported signs that the NVA was beginning to withdraw from around KSCB, though indicators of this had been noted on the 6th. NVA propaganda directed at local Montagnards had claimed a final attack would be launched against Khe Sanh, but now the theme was changed to, "Ho Chi Minh would be unhappy if they wasted their time on only 6,000 Marines." On March 22 over 1,000 rounds hit the base and ASP 1 was again struck with 4,000 rounds of artillery and 106mm ammunition destroyed. The next day, 1,109 rounds were received, the heaviest day of shelling for March. Patrols by 1/9 engaged enemy elements on the 24th and 26th, losing eight dead and 21 wounded plus a Huey gunship, while counting 57 dead NVA.

All engagements outside of Khe Sanh had been chance contacts or ambushes to this point. On March 30 B/1/26 executed the first planned attack on an NVA position since the siege had begun. The company launched its attack in the fog at 0755 hours some 300m outside the base. The objective was an 8 Battalion, 66 Regiment trench and bunker complex. Though fog prevented the use of air support, the Marines overran the positions destroying most of the bunkers with demolitions and flamethrowers. NVA counterattacks and heavy mortar fire forced the Marines to withdraw without recovering the 25 missing bodies of the February 25 ambush. They were recovered some days later. The



37th ARVN Ranger Battalion troops fight off one of the many probes they endured in February. They are armed with a .30-cal M1919A6 light machine gun. The undermanned, lightly armed battalion acquitted itself well and earned the respect of the marines. (Nguyen Ngoc Hanh)



Marines on Khe Sanh caught some shut-eye whenever and wherever possible, here in a typical trench dugout.

company suffered ten dead, two missing and 100 wounded, most returning to duty. The action was considered too costly an effort to recover the previous dead, but it did signal the beginning of the end of the siege. The NVA suffered well over 100 dead.

The action on March 30 would be the last significant action of Operation *Scotland I*—it and *Niagara* were terminated on March 31. Much of 325C Division had withdrawn into Laos and 304 was withdrawing to the southwest, though it sent some elements to the north to relieve 325C units. Elements of both divisions remained in the area, however, including artillery. Most of 101C Regiment and detachments from other regiments remained as the main rearguard. Prisoners were reporting low morale and supply problems.

With the Tet Offensive in its dying throes at the end of February, it was not long before consideration was given to the relief of Khe Sanh. There was still mopping up to do after Tet and several major engagements were fought throughout I CTZ.

OPERATION PEGASUS

On February 28, LtGen Cushman of III MAF directed MajGen Tolson of 1st CavDiv to recommence planning for the relief of Khe Sanh. Gen Abrams approved the concept on March 2. A subsequent meeting on the 10th saw the operation codenamed *Pegasus* and the newly formed Provisional Corps, Vietnam was assigned the mission (the ARVN portion of the operation was *Lam Son 207A*). The Corps was assigned 1st CavDiv, 101st AbnDiv, 3d MarDiv, and ARVN elements. The 1st CavDiv was assigned the task of planning and executing the relief. D-Day was set for April 1.

The first step was to build a C-123-capable airfield and forward base, LZ "Stud", just north of Ca Lu, 18km east-northeast of Khe Sanh where the paved QL9 turned into a dirt road. The 1st CavDiv's 8th Engineer, Marine 11th Engineer, and Naval Mobile Construction Battalion 5 built the airfield and would assist with opening QL9. With the airfield nearing completion the 1st CavDiv's 1st Squadron (Air), 9th Cavalry began reconnoitering westward with its scout helicopters on March 25. NVA activity was plotted and clearings for future LZs were blasted in the jungle using delayed-fuse bombs.

On March 30, the 3d MarDiv and 1st ARVN Regiment launched a divisionary operation northeast of Dong Ha. The 1st Marines, brigade-sized 3d ARVN Airborne Task Force, and 26th Marines were attached to the 1st CavDiv, the 26th in order to expedite coordination for the relief. This collection of 20 infantry battalions was the largest III MAF operation to date. H Hour was 0700 hours on April 1, but weather closed in, grounding the helicopters upon which the operation depended. Regardless, 2/1 and 2/3 Marines began their thrust down QL9 with 1/1 securing LZ "Stud" and the 11th Engineers clearing mines and obstacles and repairing bridges, culverts and bypasses. With weather lifting at 1300 hours 3d Brigade, 1st CavDiv launched its three battalions aboard helicopters to secure LZs "Cates" (5/7) and "Mike" (1/7, 2/7) north and south of QL9 about halfway to Khe Sanh. Artillery was flown in and was in position to support the next day's operations by nightfall. Contact with the NVA was very light. The 320 Division did fight some engagements in an



The endless occupation of marines manning the perimeter defenses of both the base and the hill positions was searching for enemy snipers, patrols, and mortar positions. Here a 7.62mm M14 rifle is used for sniping. Although it was replaced by the M16 and was not itself a sniper rifle, its greater range and penetration made it an acceptable surrogate sniper rifle.

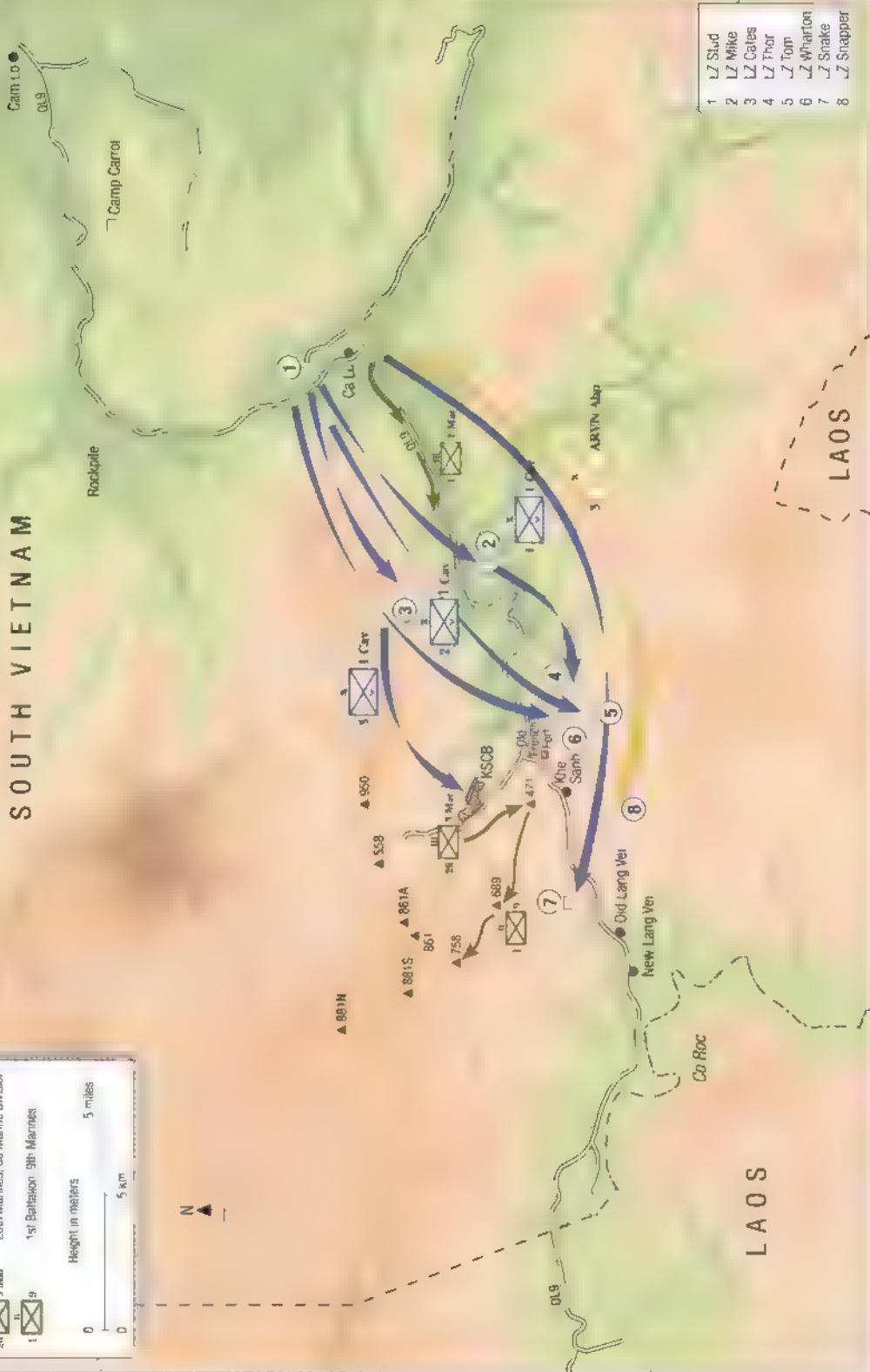
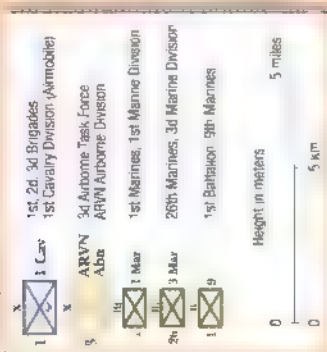
effort to keep QL 9 closed, but even the official NVA history admits that their antiaircraft defenses were inadequate to deter the 1st CavDiv.

The pace then picked up. Between April 2 and 4 the 1st CavDiv's 2d Brigade leaptrogged past the 3d and established LZs "Wharton" (1, 5, 2/12) and "Tom" (2/5) south of QL9 and southeast of Khe Sanh, while 3d Brigade's 2, 7 set up on LZ "Thor" just to their east. The battalions began probing northwestward. On the 4th the usually aggressive 1/9 Marines thrust out from the Rock Quarry 2.5km to Hill 471 above Khe Sanh village. Attacking the hill at 1500 hours, it was in their hands at 1600, but at a cost of ten KIA and 56 WIA with only 16 NVA dead left behind. The 7 Battalion, 66 Regiment counterattacked before dawn the next morning, but wasted itself leaving over 140 dead and five prisoners. The Marines lost only one KIA and 28 WIA. Meanwhile, 1st Brigade, 1st CavDiv swung deeper south and established LZ "Snapper." On April 6, G/2/26 ventured out from Hill 558 to clear the 861 ridge finger pointing toward KSCB. The day's action cost the company four KIA, 47 WIA, and six missing (later recovered), but claimed 48 dead NVA.

The 1st CavDiv battalions southeast of Khe Sanh continued to advance and the 1st Marines continued to clear QL9. On the 6th 1/5 Cavalry met stiff resistance at the Old French Fort and was relieved by 2/5 the next day. Also on the 6th, 2/12 Cavalry was air-assaulted onto 571 to relieve 1/9 Marines, the first contact by Khe Sanh defenders with a relieving unit. Then 1/9 advanced northwest toward 552 and 689. D/1/26 pushed out of KSCB on the 6th to the south to recover the bodies of 21 Marines missing since February 25. The NVA were rapidly breaking contact and opposition dwindled. The 84th Company, 8th ARVN Airborne Battalion was helicoptered in to link up with the 37th Rangers at 1350 hours, making this the first reinforcement on the base since the 37th itself arrived on January 27.

On April 7, 2d Brigade, 1st CavDiv secured the Old French Fort and Khe Sanh village. On the 8th 5, 7 Cavalry airmobiled in 500m south of the base, walked up the road, and shook hands with 1/26 Marines. The 3d Brigade airlifted its command post into KSCB at 0800 hours and relieved the 26th Marines of base defense responsibilities. There was little fanfare, just a "ho-hum" attitude as the Marines only wanted to shift into the offensive. While the siege had been wearing on the defenders,

OPERATION PEGASUS, APRIL 9, 1968



there was no feeling that they had been "saved." The 1/9 Marines first secured Hill 552 then 689, which had dominated their position in the quarry for so long, but at a cost of nine KIA and 27 WIA by mortars, without making direct contact with the NVA. The 3d ARVN Airborne Task Force moved into LZ "Snake" near Lang Vei on the 8th and began clearing QL9 to the Laotian border after a hard fight between 3d ARVN Airborne Battalion and NVA rearguards.

No enemy artillery fire fell on KSCB on the 9th, and ARVN paratroopers secured the abandoned Lang Vei site. LtGen Rosson of the Provisional Corps informed LtGen Cushman of III MAF that resupply drops were no longer necessary and the airfield was open to all traffic. Rather than resupplying *Pegasus* forces from LZ "Stud", the ammunition stockpiles on KSCB began to be issued to allow their reduction before closing the base. On April 11 the 11th Engineers completed opening QL9 to Khe Sanh, constructing nine bridges, 17 bypasses, and rebuilding 14km of road. Khe Sanh was now linked by ground to the outside world for the first time since July 1967. That same day most of the 1st CavDiv was alerted to prepare to assault the A Shau Valley to the south and units soon began departing, as did the 37th Ranger Battalion. Col Bruce F Meyers, formerly commanding Special Landing Force "Alpha" afloat off the coast, relieved Col Lawnds on the 12th after nine months at Khe Sanh. By now Marine patrols were pushing out from the hill positions and making light contact. Graves with hundreds of NVA dead were found along with abandoned individual and crew-served weapons, some vehicles, and masses of munitions and supplies.

On the night of April 13, 3/26 left 881S and occupied assault positions on the south slope of 881N. A provisional battalion weapons company was left on 881S to provide fire support and security. Artillery and mortars battered 881N all night, launching their attack at 0530 hours, followed by a massive artillery barrage on the crest, marines seized 881N at 1428 hours with a loss of six KIA and 21 WIA, while finding over 100 dead from 8 Battalion, 29C Regiment plus three prisoners. Regardless of the NVA withdrawal, that day a C-130 was destroyed on the runway by rocket fire.

Westmoreland declared, "It was clear ... that the base had outlived its usefulness. We now had the troops and helicopters to control the area ... and we had the logistics and a secure forward base at Ca Lu to support these operations." Both Generals Cushman and Rosson prepared plans to evacuate Khe Sanh based on Westmoreland's statements. However, at a commander's conference on April 15, Westmoreland stated that the force in the area would continue operations. Most of the forces would not be redeployed nor the base closed.

Pegasus was terminated at 0800 hours on the 15th and Operation *Scotland II*, the continued defense of the Khe Sanh area, was initiated. Free World losses for *Pegasus* were 51 US Marine, 42 US Army, and 51 ARVN KIA plus 667 wounded from all three services. NVA dead by body count was 1,304 (although estimated NVA dead totaled 3,500-5,000) plus 13 prisoners. Huge caches of supplies and munitions were captured.

To control units in the area, Task Force "Glick" was formed under BGen Jacob E. Glick, Assistant Commander, 3d MarDiv. He too was prepared to close the base and arrived with a minimal staff and had to plus up for continued operations. Task Force "Glick" included 1st and 26th Marines, 1/9 Marines, and 2d Brigade, 1st CavDiv - ten battalions.



A Super Gaggle flight of CH-46A "Purple Foxes" make a run into a hilltop position. The netted cargo sling would hit the ground, the crew chief would immediately release the cargo hook, and the chopper lift off in seconds. This sling load carries plastic-lined, steel 155mm propellant tubes filled with water. The tubes were plentiful and survived dropping from a low height.

The 1st Marines began helicoptering into KSCB on the 16th and the 3d ARVN Airborne Task Force departed for Hue. That same day A/1/9 was engaged southwest of 689, the battalion's position, and pinned down. Company C was sent to reinforce the beleaguered company and it too was pinned. Company D was committed and found itself in a serious fight. The new battalion commander ordered the companies to withdraw late in the afternoon leaving their dead. He was unaware of the division order that every effort would be made to recover the dead. The last elements did not close on the battalion position until 0300 hours and found there were 20 KIA and 15 missing. Two helicopters with recovery teams landed in the battle area the next day and were immediately engaged. One helicopter actually landed on and killed an NVA soldier, the enemy were so thick on the ground. The force was driven off with one of the aircraft crash-landing in the battalion perimeter. Army helicopters subsequently recovered two live Marines in the area. Most of the missing dead were recovered on the 22nd. This final disorganized fight by the defenders of Khe Sanh did not have a good ending. It cost them 41 KIA, 32 WIA, and three missing. The battalion commander was relieved, but a corporal was awarded the Navy Cross.

On the 18th the 26th Marines turned over control of KSCB to the 1st Marines under Col Stanley S. Hughes at 0800 hours. The 26th Marines and 1/9 were airlifted to Quang Tri City and Dong Ha where they were given five days' rest and recovery. Many of the troops were bitter when they learned Khe Sanh would be abandoned. What had they endured 77 days for? Why had so many died for a place that would be given up? These were age-old questions of warfare. Others just did not care. Many in the upper echelons finally admitted, though they gave other rationalizations, that the position was simply too remote and exposed, and too difficult to support with the enemy more easily able to supply its forces in the area. Others had warned of this. Also, Khe Sanh's usefulness as a launch site for the projected invasion of Laos had passed with the commencement of the Paris peace talks.

Scotland II continued until February 28, 1969 with patrol contacts, ambushes, and occasional shellings. The 1st Marines were assigned 1/1, 2/1, 2/3, and 3/4 Marines for this mission. The NVA remained active in the area, but at greatly reduced levels. In May, increased 308 Division activity was discovered south of Khe Sanh and Operation *Robin* was conducted, but these post siege actions are beyond the scope of this book, with one exception.

CLOSING KHE SANH

The decision to finally evacuate Khe Sanh was made on June 1. Ten days later Westmoreland departed Vietnam and General Creighton W. Abrams took over command of MACV. LZ "Stud" at Ca Lu would become the northwestern-most base in an effort to shorten supply lines, consolidate mobile operations, and control the tri-border area through reconnaissance-in-force. The 1st Marines would secure Khe Sanh as 3/9 Marines and Company A, 1st Engineer Battalion would not only evacuate supplies and material, and dismantle the base, but also raze it. Nothing useable would be left for the enemy. The 3/9 served as a work



ARVN Rangers man their ragged, hastily prepared, outer perimeter during an NVA probe. The officer talking on the AN/PRC-25 radio has the ARVN Ranger snarling tiger's head painted on the front of his helmet. Visible weapons include a 40mm M79 grenade launcher and 7.62mm M60 machine gun. (Nguyen Ngoc Hanh)

force and they was augmented by detachments of the 3d and 11th Engineer and 3d Shore Party Battalions. Seabees from Naval Mobile Construction Battalion Unit 301, the same unit that had improved and extended the runway almost a year before, would recover the matting – this was Operation *Charlie*, which was commenced on June 19 by Task Force Hotel with the 1st Marines.

Some 800 bunkers and positions were dismantled and buildings torn down or burned. Hundreds of thousands of sandbags were slit and spilled. Three miles of concertina barriers were either recovered or bulldozed into trenches and backfilled. Vehicle hulks and damaged equipment were cut up with torches and buried in pits to deny the enemy propaganda displays. Much of the material (lumber, timber, picket posts, concertina wire, runway matting, base equipment, etc) was hauled to LZ "Stud", now redesignated Vandegrift Combat Base, for reuse. As a last measure the barren and blasted red earth was dusted with tear gas powder to discourage NVA scavengers. The last convoy out was on July 5 and 3/4 Marines officially closed Khe Sanh Combat Base with a brief flag-lowering ceremony at 2000 hours. Engineers at the tail end of the convoy removed tactical bridging behind them on QL9 on June 6.

There was some final action at Khe Sanh. When it became apparent to the NVA command that Khe Sanh was being evacuated, it was expected that at least some small-scale attacks would be conducted in order to claim the NVA had driven the Americans out and overrun the base. On July 1, 1/3/4 engaged an NVA unit in the vicinity of the Old French Fort, killing over 200 with a loss of two KIA. The 1/1 Marines remained in the vicinity of the former base for a week, picking off scouts and scavengers. The last fight was on Hill 689 where missing Marines were recovered with a loss of 11 Marines and 89 NVA killed. Finally, 1/1 was loaded aboard helicopters with their dead and the remains of seven previously missing Marines and lifted off for Quang Tri City.

The official NVA history stated:

On June 26 1968, the enemy announced he was withdrawing from Khe Sanh. Our armed forces rapidly tightened their siege ring, mounted shelling attacks, suppressed the enemy's efforts to transport troops by helicopter, and conducted fierce attacks to block the overland route, forcing the enemy to prolong his withdrawal . . . On July 15 1968 our soldiers were in complete control of Khe Sanh.

Regardless of the inflation of their final actions at Khe Sanh, the NVA was now in control of a strategically important area and its lines of communication were extended further into South Vietnam.

The radio relay site on 950 was turned over to the ARVN, and as Hickory Hill it remained in operation until it was overrun on June 5, 1971.



15 tons of cargo is spilled out of the tailgate of a C-130E "Herkybird" from 400ft. The low altitude and delayed opening of the parachutes allowed extremely good accuracy on to the small DZ. The French dropped from much higher altitudes.

AFTERMATH

Casualties suffered by both sides at Khe Sanh have long been disputed, with much debate over the figures. Part of the problem lies in the specific timeframe, area, and units to which figures were "credited" to Khe Sanh. Some figures count the casualties for Operation *Scotland I*, which ran from November 1, 1967 to April 15, 1968 and includes a period of almost seven weeks prior to the siege commencing on January 20. Other figures are listed for the period of the 77-day siege, January 20–April 15, 1968, but the most quoted figures only cover January 20–March 31 and count casualties from April 1–15 as part of Operation *Pegasus*, even if incurred on the base. Casualty figures were usually restricted to those suffered on KSCB, the hill outposts, and on patrols in the base's immediate vicinity. Casualties for operations *Pegasus* and *Scotland II* are counted separately.

The fiercest debates revolve around simply who was counted. The most frequently quoted figures are those supplied by the Marine Corps. These figures, however, only count Marines and assigned Navy medical personnel in the immediate Khe Sanh area. Those who were not included in the Marine totals come to a significant number of casualties:

- US Army, Air Force, and Navy Seabees on KSCB
- US Army, Air Force and Navy aircrewmembers in the immediate Khe Sanh area
- FOB-3 US and indigenous troops
- 37th ARVN Ranger Battalion
- US and RF/PF troops at Khe Sanh village
- USSF and CIDG troops at Lang Vei
- 33d Royal Laotian Battalion
- C-123 shot down on March 6 several miles out from Khe Sanh with a loss of 49 occupants

Precise figures are not available for all of these categories. Approximately 70 other US non-Marine personnel were killed at Khe Sanh (this does not include aircrewmembers lost in the area). At Lang Vei eight USSF were killed and three captured while some 200 CIDG were killed or taken prisoner. ARVN Ranger, RF/PF, indigenous FOB-3, and Laotian losses are not known.

The Marines lost 205 KIA between January 20 and March 31. However, when individual Marine unit losses are totaled the figure comes to 274. It appears that 1/9 was not included in 26th Marines totals. "Charlie Med," the KSCB medical unit, records 2,541 treated, 2,037 WIA and 490 non-battle injuries. No figures are available for non battle deaths. A total of 2,249 wounded/injured were evacuated and 292 returned to duty. It is suspected that these are only Marines and possibly other US wounded/injured, but does not include the various categories of indigenous personnel.

In regards to both operations *Scotland I* and *Pegasus*, one source gives the total US casualty count for both operations as 730 KIA, 2,642 WIA, and

seven missing, and an ARVN count of 229 KIA and 436 WIA. is not certain what categories of US personnel were actually included nor does it address non-ARVN indigenous personnel (CIDG, RF/PF, SOG commandos).

Actual NVA casualties are of course unknown and can only be estimated.

Official NVA histories never mention their own casualties. The Marine body count of enemy casualties since *Scotland I* commenced on November 1, 1967 was 1,602 dead, seven prisoners, and two defectors. Estimates of overall enemy dead, however, were 10–15,000, though it has been questioned whether it was as high as this, considering the low strength of the two divisions and other units committed. It is recognized that rear support units suffered heavy losses and that replacements and units from other divisions may have been committed, but the actual losses may have been on the lower side of the range.

The NVA's official history claims:

During the 170-day siege²³ of Khe Sanh we eliminated from the field of combat 17,000 enemy troops (including 13,000 Americans) and destroyed or shot down 480 aircraft of all types. Our forces at Khe Sanh successfully fulfilled their mission of drawing in and tying down a large enemy force (which at its largest totaled 32 battalions, 26 of which were American, representing one-quarter of all the US combat battalions in South Vietnam

The small communist monument at Khe Sanh today claims, "112,000 US and puppet troops killed and captured. 197 airplanes shot down." These claims of course are absurd. A total of only 16 US and four ARVN battalions were committed to Khe Sanh and *Pegasus* together.

The 26th Marines, and attachments, were awarded the Presidential Unit Citation (Navy) for their performance at Khe Sanh from January 20–March 31, 1968. The media's fanciful doomsday predictions were unfulfilled.

1967 Pre-siege US and NVA Casualties, Khe Sanh

Action	To-From Dates	Marine			NVA		
		KIA	MIA	WIA	KIA	Probable	POW
Hill Battles	April 24–May 14	168	2	443	940	1,500	6
Operation Crockett	May 15–July 16	52	1	255	204	350	2
Operation Ardmore	July 17–October 31	10	0	24	113	225	0



Thousands of Montagnard, Vietnamese, and Laotian refugees were flown out of Khe Sanh during the course of the siege. Here Vietnamese rush to load a C-123K. Only the "K" model was used at Khe Sanh, as its rocket-assisted take-off capability was necessary to help it climb steeply and quickly out of antiaircraft range.

²³ The NVA viewed the "siege" as lasting until the base was evacuated in June 1968.

THE BATTLEFIELD TODAY

Liberated base monument. The area of Ta Con⁽²⁴⁾ Base built by U.S. and Saigon puppets. Built 1967. Airfield and well-constructed defense system Co Luong [town], Dong Ha [district], Quang Tri [province]. U.S. Army and puppets used to monitor the movement and tried to halt assistance from the north into the battle for Indochina

After 170 days and nights of attack by the surrounding Liberation Army, Ta Con was completely liberated. The Liberation Army destroyed the defense system for the battle for Indochina 112,000 U.S. and puppet troops killed and captured. 197 airplanes shot down. Much war material was captured and destroyed. Khe Sanh was another Dien Bien Phu for the U.S.

A simple vertical slab concrete marker atop a brick foundation commemorates the battlefield, 6ft high and 5½ft wide, covered with Vietnamese graffiti. The translated inscription reads as above.

Today Khe Sanh is as remote and desolate as it was almost 40 years ago. The area is accessible to tourists, however, and occasional veterans visit the cloud-shrouded plateau after a lengthy bus ride from Da Nang. Vietnam's communist government encourages American veterans to visit the country, and airline flights direct from the US were commenced in December 2004. A rough dirt road connects KSCB with Khe Sanh village to the south. Little remains except the red dirt and silent hills, often shrouded in fog. Visitors frequently remark on the eerie silence of the place. Much of the area is cultivated with coffee plants. Shallow brush-choked depressions mark the locations of bunkers and positions. Pieces of barbed wire and scraps of plastic sandbags can be found. Vietnamese entrepreneurs routinely search the area after rains, collecting cartridge cases, machine-gun links, shell fragments, pieces of parachute cord stained clay-red, and other assorted battlefield litter. The memorabilia are sold in little souvenir stands, although some of the items may be fakes. Bru tribesmen dig in the old ASP 1 to recover artillery and mortar projectiles to sell for scrap metal. Depressions marking trenches and bunkers on the outpost hills can still be seen, but they are mostly overgrown with dense vegetation. Barbed wire entanglements still surround the hill positions. No one ventures on to the hills as they are littered with unexploded munitions, as is much of the plateau and the former base itself. Visitors are cautioned not to leave footpaths in the hills.

The small museum, built in the late 1990s, houses photographs and battlefield relics. Resting nearby are a battered US 155mm howitzer (misidentified as 175mm) and an ARVN M41A3 tank hulk, both brought there after the war. Some poor replicas of sandbag bunkers have been constructed.

At the Lang Vei Special Forces Camp site all that can be seen are some partly exposed concrete bunker walls and part of the command post. There the government erected a memorial mounting a PT-76 tank. The remains of bunkers were largely destroyed in 2003 when QL9, now the Trans-Asian Highway, was bulldozed and the terrain much altered.

In the Khe Sanh Museum, Marine veterans have written their impressions in the guest book. A study of the entries, often written in plain, blunt language, express much the same sentiments the Marines felt almost 40 years ago: they never felt they were under siege or in danger of being defeated, and they respected their opponents, but strongly felt they had beaten the best the NVA could throw at them.

²⁴ Ta Con was a Montagnard village south of FOB-3 and the NVA name for the US base.

BIBLIOGRAPHY

- Corbett, John, *West Dickens Avenue: A Marine at Khe Sanh*, Presidio, Novato, CA, 2003
- Ewing, Michael, *The Illustrated History of Khe Sanh*, Bantam Books, New York, 1987
- Fall, Bernard B., *Hell in a very Small Place: The Siege of Dien Bien Phu*, J.B. Lippincott, Philadelphia, 1966
- Hamme, Eric, *Khe Sanh: Siege in the Clouds. An Oral History*, iBooks, New York, 2004
- Kruak, Victor H., *First to Fight*, Naval Institute Press, Annapolis, MD, 1984
- McCoy, James W., *Secrets of the Viet Cong*, Hippocrene Books, New York, 1992
- Murphy, Edward, *The Hill Fights: The First Battle of Khe Sanh*, Presidio, Novato, CA, 2003
- Naty, Bernard C., *Air Power and the Fight for Khe Sanh*, US Air Force, Washington, DC, 1973
- Pearson, Lt. Gen. Willard, *The War in the Northern Provinces 1966-1968*, Vietnam Studies, Department of the Army, Washington, DC, 1975.
- Phillips, William J., *Night of the Silver Stars: The Battle of Lang Vei*, Naval Institute Press, Annapolis, MD, 1997.
- Pisor, Robert, *The End of the Line: The Siege of Khe Sanh*, Norton, New York, 1982
- Prados, John and Ray W. Stubbe, *Valley of Decision: The Siege of Khe Sanh*, Houghton Mifflin, Boston, 1991
- Pribbenow, Merle L. (translator), *Victory in Vietnam: The Official History of the People's Army of Vietnam, 1954-1975*, University Press of Kansas, Lawrence, KS, 2002. (Originally published as *History of the People's Army of Vietnam, Vol. II, Military History Institute of Vietnam, Hanoi, 1994*)
- Shore, Capt. Moyers S., *The Battle for Khe Sanh*, Headquarters Marine Corps, Washington, DC, 1969.
- Shulimson, Jack, LTCol. Leonard A. Biasiol, Charles R. Smith, and Capt. David A. Dawson, *US Marines in Vietnam: The Defining Year, 1968*, Marine Corps Vietnam Series, Headquarters Marine Corps, Washington, DC, 1997.
- Spencer, Ernie, *Welcome to Vietnam, Macho Man: Reflections of a Khe Sanh Vet*, Corps Productions, Alamo, CA, 1991.
- Stanton, Shelby L., *Anatomy of a Division: The 1st Cav in Vietnam*, Presidio, Novato, CA, 1987 (Discusses Operation Pegasus)
- Stockwell, David B., *Tanks in the Wire: The First Use of Enemy Armor in Vietnam*, Daring Books, Canton, OH, 1989
- Stubbe, Ray W., *Khe Sanh: The Final Formation*, privately published, 1995 (Lists all casualties. Available from Ray Stubbe, 8766 Parkview Court, Wauwatosa, WI 53226)
- Teifer, Maj. Gary L., LTCol. Lane Rogers, V. Keith Fleming, Jr., *US Marines in Vietnam: Fighting the North Vietnamese, 1967*, Marine Corps Vietnam Series, Headquarters Marine Corps, Washington, DC, 1984.
- Wendrow, Martin, *The Last Valley: Dien Bien Phu and the French Defeat in Indochina*, Weidenfeld & Nicholson, London, 2004
- _____, *Vietnam Order of Battle*, Kraus Reprint, Millwood, NY, 1986.

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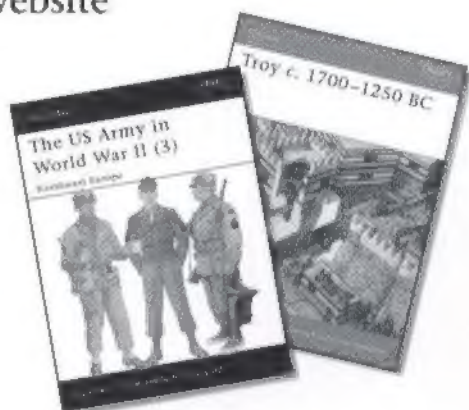
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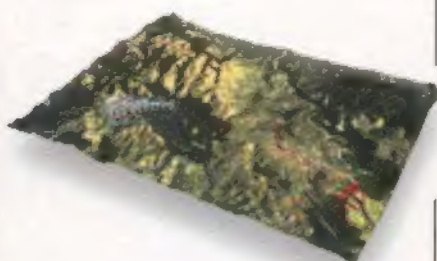
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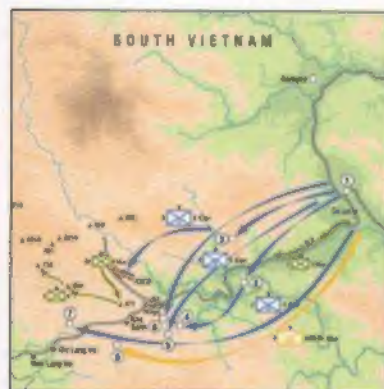
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